

**Wealth and Income:
How Did Small Businesses Fare from 1989 to 1998?**

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Introduction

According to the Small Business Administration new business formation reached a record level in 1998 with 898,000 new firms opening their doors (SBA, 1999). Between 1982 and 1998, the number of business tax returns increased by nearly 73 percent to nearly 25 million (SBA, 1999). About 21 million Americans are reported to be engaged in some type of entrepreneurial activity. All of these indicators suggest that small businesses have continued to grow and develop over the past decade. Not only has the number of small businesses grown, but the income derived from these business activities continues to increase. Income from non-farm sole proprietors and partners, who comprise the vast majority of small businesses, increased by over 6 percent from 1997 to 1998 and compensation to employees rose by over 7 percent (SBA, 1999). The 1990's have been marked by the largest ever peace time expansion in the U.S. economy. Since 1992, the Dow Jones Industrial Average has increased from 3,250 to over 10,000 points, unemployment rates have declined from 6.9 to less than 5 percent and consumer confidence has soared. Clearly, we are witnessing growth in the number of businesses, growth in owner and investor income, growth in the payments to employees working for these businesses and changes in wealth. This rapid expansion of business income has raised an important equity question: who's earning the income and accumulating the wealth?

Recent studies have carefully examined the financial structure of small businesses and assessed the relationship between the risk preference and financial structure of their owners (Coleman, 2000; Xaio, Alhabeeb, Hong and Haynes, 2000). The general economic expansion of the 1990s has dramatically increased the wealth of some individuals while leaving others with less modest increases, or decreases, in wealth. The expansion in small businesses has required the human, physical and financial capital of the individuals who own, invest and manage a small business. At one end of the small business spectrum the owner, investor and manager are the same person; while at the other end of the spectrum different individuals play each of these roles. Using the owner/investor/manager distinction of the business owner and Surveys of Consumer Finance from 1989 to 1998, this study assesses changes in the income earned and wealth accumulated by different types of small businesses from 1989 to 1998.

Economic expansions increase the size of the economic pie, however all families are unlikely to share equally in these economic fruits. This study examines changes in the distributions of income and wealth for four primary types of businesses: self-employed; small business owner-manager; angel investor; and small business owner-

manager and angel investor (called other angel capitalists). This study addresses three questions:

- (1) Have families with small business owners living in the household increased their incomes by more than families without small business owners living in the household;
- (2) Have families with small business owners living in the household increased their wealth by more than families without small business owners living in the household; and
- (3) Who are those small business owning families that have prospered and declined in the 1990s (*who are the winners and losers*)?

Literature Review

The financial situation of U.S. families changed substantially between 1989 and 1998. The literature review examines relevant literature assessing changes in income and wealth of U.S. families. Special attention is given to evidence on changes in the income and wealth of U.S. families who own one or more small business. A relatively comprehensive and extensive literature exists on the financial condition (income and wealth) of families, but the literature is much less comprehensive for that subset of families who own businesses.

The Federal Reserve Board assesses recent changes in the U.S. family finances every three years when summarizing results derived from the most recent Survey of Consumer Finances (Kennickell and Shack-Marquez, 1992; Kennickell and Starr-McCluer, 1994; Kennickell and Starr-McCluer, 1997; Kennickell, Starr-McCluer and Surette, 2000). The mean and median income and net worth summarizes from these reports are summarized in Table A in 1998 dollars. The reporting of both mean and median financial estimates (income and net worth) is important because of the skewed distribution of both income and net worth data. For instance, a comparison of the relative changes in mean and median net worth indicates whether the share of aggregate net worth held by the poorest or wealthiest has increased or decreased. An increase in the mean that is higher than a corresponding increase in the median often suggests an increase in the wealth shares of families at the top end of the distribution.

Between 1983 and 1989 real mean family income increased (\$44,400 to \$51,700 in 1998 dollars) while real median family income remained virtually unchanged around \$32,000 (Kennickell and Shack-Marquez, 1992). Mean wealth rose by over 24 percent, while median wealth rose nearly 10 percent. These findings suggest that family income and wealth became somewhat more concentrated among families with higher income and wealth, respectively. Kennickell and Shack-Marquez (1992) suggest that several factors affected family income and wealth, including financial deregulation; progressive elimination of tax deductions for consumer interest; and tax changes, such as the elimination of general deductions for individual retirement accounts.

Table A Mean and Median Income and Net Worth, 1983 to 1998

Thousands of 1998 dollars

Year	Before Tax Income		Net Worth	
	Mean	Median	Mean	Median
1983	44.4	32.3	189.8	54.4
1989	51.7	32.8	236.9	59.7
1992	45.6	30.4	212.7	56.5
1995	47.5	32.7	224.8	60.9
1998	53.1	33.4	282.5	71.6

Sources: Kennickell, A. & Shack-Marquez, J. (1992). Changes in family finances from 1983 to 1989: Evidence from the Survey of Consumer Finances. Federal Reserve Bulletin, Tables 1 and 2; and Kennickell, A.B., Starr-McCluer, M. & Surette, B.J. (2000). Changes in family finances in the U.S.: Evidence from the Survey of Consumer Finances. Federal Reserve Bulletin, Tables 1 and 3.

Between 1989 and 1992, real mean and median family income and real mean and median family wealth decreased (Kennickell and Starr-McCluer, 1994). Several important changes occurred during this period of time. Interest rates declined and families tended to move their asset portfolios away from time deposits and toward mutual funds; families owned more tax deferred retirement accounts; and income and wealth grew substantially for non-White and Hispanic families.

Between 1992 and 1995, real mean and median family income increased slightly, although not sufficiently to offset the declines realized from 1989 to 1992 (Kennickell and Starr-McCluer, 1997). By 1995, median income and wealth were nearly the same as in 1989, however mean income and wealth had not fully recovered. This period of time from 1992 through 1995 was one of continued economic expansion in the U.S. economy. By 1998, real mean and median family income had surpassed their 1989 levels, having exhibited strong growth between 1995 and 1998. This period was marked by an increase in the holding of stock equity and a booming stock market (Kennickell, Starr-McCluer and Surette, 2000). While family indebtedness increased over this period of time, asset growth was more rapid. At this juncture in 1998, the economy was in the seventh year of an economic expansion. Civilian unemployment was around 4.5 percent and the average annual inflation rate of 2.2 percent, as measured by the consumer price index, had been low for the previous 3 years.

From 1989 through 1998, real family income and wealth increased in the U.S. However, this growth in family income and wealth did not appear to be evenly distributed across the economy. Using the 1989 through 1995 Survey of Consumer Finances, Wolff (1998) argued that the distribution of wealth had become much less equal and that only households in the top 20 percent of income and wealth made any substantive gains. He suggested that all other groups suffered real wealth and income losses.

While no other authors addressed small business owners, Wolff (1998) argued that “. . . small business equity, which tends to move with stock prices, is also highly concentrated among the rich.” While small business owners may have realized an increase in the value of their assets with the increase in the stock market, other evidence suggests that small business owners hold more debt than non-business owning families

(Haynes and Avery, 1996). In addition, recent research suggests that small business owners are willing to assume more risk and hold more risky portfolios of assets (Xaio, Alhabeeb, Hong and Haynes, 2001). Thus, whether or not families owning small businesses have improved their financial status between 1989 and 1998 is an open question. This study examines changes in the real income and wealth of families owning small businesses to determine if they have higher mean income and wealth and increasing or decreasing shares of total income and wealth from 1989 to 1998.

Conceptual Model

This is primarily an empirical study that examines the changing economic status of families who do and do not own a small business in the U.S. from 1989 through 1998. Five major hypotheses are explored:

- (1) Families owning small businesses have increased real **mean income** from 1992 through 1998 more than families not owning small businesses;
- (2) Families owning small businesses have increased real **mean wealth** from 1992 through 1998 more than families not owning small businesses;
- (3) Families owning small businesses have increased their **share of aggregate income** from 1992 through 1998 more than families not owning small businesses;
- (4) Families owning small businesses have increased their **share of aggregate wealth** from 1992 through 1998 more than families not owning small businesses;
- (5) Among families owning small business, those families holding stocks are more likely to be classified as high income (greater than \$50,000) and high wealth (greater than \$1,000,000) families than families not holding stocks.

Empirical Considerations

Data

The 1989 through 1998 Surveys of Consumer Finances (SCF) are conducted for the Federal Reserve Board. The 1989 SCF was collected by the Survey Research Center at the University of Michigan. The most recent surveys were collected by the National Opinion Research Center at the University of Chicago. The surveys are designed to supply detailed and reliable information on balance sheets, use of financial services, pensions, labor force participation, cash income and demographic characteristics of U.S. households.

The SCF utilizes a dual frame sample to provide adequate coverage of the population. One frame is a multistage area probability sample, which provides adequate coverage of widely held assets and liabilities. The second frame is a list design employed to over-sample relatively wealthy households. Response rates for the area probability and list samples in 1992 were approximately 70 and 34 percent, respectively (Table B).

Table B Sample Size for the 1989 through 1998 Surveys of Consumer Finance

Year	Area Probability Sample (number)	Response Rate (%)	List Sample (number)	Response Rate (%)	Total Sample (number)
1998	2,813	70	1,496	35	4,309
1995	2,780	70	1,519	35	4,299
1992	2,456	70	1,450	34	3,906
1989	2,277	70	866	34	3,143

Research conducted by the Federal Reserve Bank suggests that non-response is positively correlated with wealth. This study is primarily interested in examining small business owning families. However, the entire sample is employed to assess the differences between business owning and non-business owning families. The SCF survey asks respondents about the previous year, hence the SCF for 1998 actually gathers information about the finances of the family and business in 1997.

The variables of interest in this study include business ownership status of the household, household income and household wealth (including assets and debt held by members of the household). Business ownership status was determined by whether an individual owned and/or actively managed at least one business. Business owners are separated into four categories: self-employed, who are business owner/managers with one or fewer employees; small business managers, who are business owner/managers with more than one employee; angel investors, who are business owners with no active management responsibilities in any business; and other angel investors, who are primarily business owners with other investments where they provide some management support (Table C). Household income is computed by summing the following sources of income: wages and salaries, interest, dividends, asset sales, rents, unemployment, child support, welfare, social security and other sources. The wealth of the household was determined by generating a balance sheet, using a program supplied by the Federal Reserve Board, to estimate the wealth of each household. Total wealth was computed by subtracting total liabilities from total financial and non-financial assets. Financial assets were computed by summing the value of transaction accounts, certificates of deposit, directly held mutual funds, stocks, bonds, individual retirement accounts, saving bonds, cash value of life insurance, other managed assets and other financial assets. Non-Financial assets were computed by summing the value of vehicles, primary residence, other residential real estate, equity in nonresidential real estate, business interests and other non-financial assets. Liabilities were tabulated by summing the value of housing debt, other lines of credit, debt for other residential property, credit cards, installment loans and other debts.

Potential control variables include personal and demographic characteristics of the household head and business owner, and characteristics of the business (Table C). The personal and demographic characteristics include age, race (White, Black, Hispanic and other), gender, education (no high school diploma, high school diploma, some college and college degree or more), marital status (married, previously married or never married) and census region (north east, north central, south and west). Business

characteristics include, number of employees, age of the firm, legal organization, industrial classification, founding strategy and gross sales.

The sampling frame for this analysis is U.S. households, which are referred to as families in this report. Personal and demographic characteristics are those characteristics of the respondent interviewed, typically the household head. If the respondent or someone in the household owns and manages a business, this study is referring to the largest business. No business information is available for businesses owned but not managed by the respondent. Small businesses are those businesses owned and managed by a family member with fewer than 500 employees.

Table C Definitions of Variables Used in this Study

Variable of Interest	Definition
Business ownership	
Self-employed	Business owner and manager with one or fewer employees.
Small business manager	Business owner and manager with more than one and less than 500 employees.
Angel investor	Business owners with no active management responsibilities.
Other angel investor	Business owners with other investments where they provide some management.
Family income, before tax	Sum of wages and salaries, professional practice, non-taxable investment, other interest, dividends, sale of stocks/bonds/real estate, net rent/trusts/royalties, unemployment or worker's compensation, child support or alimony, welfare, food stamps, social security, pensions and other sources.
Family wealth	Sum of financial (including transaction accounts, certificates of deposit, directly held mutual funds, stocks, bonds, IRAs, cash value of life insurance and others) and non-financial assets (including vehicles, primary residence, other residential real estate, business interests and others) less liabilities (including housing, line of credit, residential property, credit card, installment loan and other debts).
Personal and Family	
Age	Age of the household head. Age is separated into 6 categories (less than 35, 35 to 44, 45 to 54, 55 to 64, 65 to 74 and 75 and over).

Table C Definitions of Variables Used in this Study (continued)

Variable of Interest	Definition
Race	Race of the household head. Race is separated into four categories (White, Black, Hispanic and Other).
Gender	Gender of the household head.
Education	Educational attainment of the household head. This variable is separated into four categories (no high school diploma, high school diploma only, some college, college degree or more).
Marital status	Marital status of the household head. Marital status is separated into three categories (married or living with a partner, previously married and never married).
Census region	Census region where the house is located. Census region is separated into four categories (Northeast, Northcentral, South and West). Census information is not available for 1989.
Business	
Business size	Number of employees in the largest business owned by the family. This variable is separated into 5 categories (0 to 1, 2 to 4, 5 to 9, 10 to 24 and 25 to 500).
Business age	Age of the largest business from the date acquired by the current owner. Business age is separated into 5 categories (less 1 year, 1 to 4, 5 to 9, 10 to 19 and 20 or more).
Legal organization	Legal organization of the largest business. Legal organization is separated into 4 categories (partnership, sole proprietorship, corporation-sub S and corporation – sub C).
Industrial classification	Industrial classification of the largest business. Industrial classification is separated into five categories (agriculture; construction and manufacturing; wholesale and retail; services and other; and unclassified).
Founding status	Founding status of the largest business, which asks the following: how did you or your family living here first acquire this business. Founding status is separated into three categories (bought or invested; started; and inherited or other).
Gross sales	Gross sales of the largest business.

Models

This study is primarily descriptive, where family income and wealth are compared for business and non-business owning families. This descriptive analysis requires the careful comparison of means using chi-square and t-tests to assess difference among business and non-business owning families across time (1989 through 1998). These simple comparisons are supported by more complex empirical models, which are designed to assess the determinants of high income (greater than \$50,000 total family income) and high wealth (greater than \$1,000,000 total family wealth).

Logistic regression models are used to assess the types of families and business owners more likely to be classified as high income or high wealth. This study uses non-linear logistic regression models to predict the likelihood of high family income or wealth from binomial classifications high income (yes/no) and high wealth (yes/no). Linear regressions models are inappropriate because they may generate predictions that are outside the range of the binomial data, where the predicted values are less than 0 or greater than 1. Initially, personal and demographic characteristics of the family are regressed on dummy variables representing high income and high wealth. The first income model is specified as follows:

$$HI = \alpha_0 + \alpha_1age + \alpha_2race + \alpha_3gender + \alpha_4ed + \alpha_5ms + \alpha_6cen + \alpha_7bus + \varepsilon$$

where HI = high income dummy (1=high income, 0 otherwise);
age = age of the household head (dummy variables for less than 35, 35 to 44, 45 to 54, 55 to 64, 65 to 74 and 75 or older);
race = race of the household head (dummy variables for White and other);
gender = gender of household head;
ed = education level (categorical variables for some high school, high school graduate, some college, college graduate);
ms = marital status (dummy variables for married or otherwise);
cen = census region (dummy variables for north east, north central, south, west); and
bus = business owner (1 = yes, 0 = no).

The first wealth model, which uses the same independent variables as those employed in the first income model, is represented as follows:

$$HW = \alpha_0 + \alpha_1age + \alpha_2race + \alpha_3gender + \alpha_4ed + \alpha_5ms + \alpha_6cen + \alpha_7bus + \varepsilon$$

where HW = high wealth dummy (1=high wealth, 0 otherwise).

The second set of models utilizes the same structure as the first two models. However, the business owner variable is changed to business owner and manager. In this instance the business owner and manager is either self-employed or has a small business that the individual owns and manages.

The third set models repeat the aforementioned models for small business owners and managers only and examine the association between high income and wealth and characteristics of the family and the business (number of employees, age of the business, legal organization, industrial classification and founding status). The third income model is specified as follows:

$$HI = \alpha_0 + \alpha_1age + \alpha_2race + \alpha_3gender + \alpha_4ed + \alpha_5ms + \alpha_6cen + \alpha_7employees + \alpha_8busage + \alpha_9legal + \alpha_{10}industry + \alpha_{11}found + \alpha_{12}is + \epsilon$$

where HI = high income dummy (1=high income, 0 otherwise);
employees = number of employees (0-1, 2-4, 5-9, 10-25 and 25 or more employees)
busage = age of the firm (less than 1, 1-4, 5-9, 10-19 and 20 or more years);
legal = legal organization (dummy variables for partnership, sole proprietorship, corporation – sub s and corporation – regular);
industry = industrial classification (dummy variables for agriculture, construction/manufacturing, wholesale/retail and service/other);
found = founding status (dummy variables for bought/invest, started and inherited/other); and
is = income sources (dummy variable for each source of income).

The third wealth model simply replaces the dependent variable HI (high income) with HW (high wealth) and replaces income sources (is) with wealth sources (nw).

These regression models are employed for each of the years (1989, 1992, 1995 and 1998). The model specification is identical for each year, except in 1989 when census region information was not available. The next section summarizes the results of this study.

Results

This section compares business and non-business owning families, assesses the probability of being classified as high income and/or high wealth, compares real mean and median income and wealth, compares the shares of total family income and wealth between business and non-business owning families and across different types of business owners, and assesses the determinants of high income and high wealth families over the nine years of this study (1989 through 1998),

The first sets of comparisons examine business and non-business owning households for 1989 through 1998 (Tables 1.1 and 1.2). Table 1.1 compares the personal and demographic characteristics of the household between business owning and non-business owning families. Table 1.2 compares the composition of income and wealth between business owning and non-business owning families. In general, the differences between the personal and demographic characteristics of the household head in business and non-business households can be summarized as follows:

- (1) Household heads in business owning households are more likely to be between 35 and 64 years of age. These households have a lower percentage of household heads that are less than 35 years of age (14.4 versus 24.6 percent in 1998) and older than 65 years of age (11.8 versus 22.8 in 1998) household heads than non-business households (Table 1.1)

- (2) Household heads in business owning households are more likely to be White (non-minority).
- (3) Household heads in business owning households are more likely to be male.
- (4) Household heads in business owning households are more likely have more education (especially a college degree or more).
- (5) Household heads in business owning households are more likely to earn more income (or to be in a higher income bracket).
- (6) Household heads in business owning households are more likely to be in a higher wealth bracket.
- (7) Household heads in business owning households are more likely to be married.
- (8) Household heads in business owning households are more likely to have income from wages and salaries (85 versus 73.8 percent in 1998) than non-business households. In addition, household heads in business owning households are more likely to have professional practice, non-taxable sources, other interest, dividends, proceeds from the sale of stocks and bonds, rent, trusts and royalties income than non-business owning households (Table 1.2).
- (9) Household heads in business owning households are less likely to have income from unemployment or workman's compensation, child support or alimony, welfare or food stamps, social security, pension or retirement sources.
- (10) Household heads in business owning households are more likely to have money in checking, savings, money market, money market mutual fund, call, stock market mutual fund, other bond mutual fund, stocks, bonds (savings, government and other), cash value in life insurance accounts, and vehicles, a primary residence (own their home) and other real estate. In addition, they are more likely to have housing debt (mortgage), other lines of credit, debt on other residential property and credit card debt.
- (11) Household heads in business owning households are more likely to hold a loan from a commercial bank, thrift institution, finance company, other institutional lender and credit card company than a non-business owning household.
- (12) And finally, household heads in business owning households are more likely to hold credit card, line of credit, mortgage or other debt.

Families owning businesses are significantly more likely to be high income earners and high wealth holders than families not owning businesses (Table 2.0). In 1998, a typical business owning family has over a 58 percent chance of being classified as a high income family and over a 18 percent chance of being a millionaire. If the business owning family also holds publicly traded stock, they have a 73 percent chance of being classified as high income and a 35 percent chance of being a millionaire. Since 1989, business owning families have been nearly twice as likely to be high income as

Table 1.1 Profile of the Characteristics of Non-Business and Business Owning Families, 1989-1998

Weighted Means								
Family Characteristic	Non-Business Owning Families				Business Owning Families			
	1989 (%)	1992 (%)	1995 (%)	1998 (%)	1989 (%)	1992 (%)	1995 (%)	1998 (%)
<i>Age of household head</i>								
Less than 35	28.9	26.9	25.7	24.6	21.8	19.1	18.6	14.4
35-44	20.1	21.3	22.0	22.5	31.6	30.8	29.8	28.7
45-54	14.3	15.7	16.8	17.8	20.4	20.0	25.1	28.9
55-64	13.8	12.6	12.3	12.4	14.0	17.6	13.6	16.1
65-74	13.2	13.3	12.5	11.5	8.9	9.1	9.0	9.4
75 and over	9.6	10.2	10.7	11.3	3.4	3.4	3.8	2.4
<i>Race of household head</i>								
White	73.0	73.5	75.8	76.2	86.9	86.1	89.3	89.1
Black	13.9	14.0	14.1	12.7	5.3	4.7	3.9	5.1
Hispanic	8.8	8.1	6.0	7.8	2.8	3.4	3.5	2.3
Other	4.4	4.3	4.1	3.2	4.9	5.8	3.3	3.5
<i>Gender of household head</i>								
Male	69.0	69.0	68.4	69.2	90.3	91.1	90.0	92.4
Female	31.0	31.0	31.6	30.8	9.7	8.9	10.0	7.6
<i>Education of household head</i>								
No high school diploma	26.0	22.6	19.9	17.7	13.9	7.2	8.6	7.0
High school diploma only	32.8	31.1	32.6	33.2	27.8	23.8	25.3	22.4
Some college	15.4	17.8	19.0	18.1	16.9	17.4	19.5	21.7
College degree or more	25.8	28.4	28.5	31.1	41.4	51.6	46.6	48.9
<i>Income of household (dollars)</i>								
Less than 10,000	16.7	16.4	16.5	13.8	2.6	2.9	5.3	4.5
10,000-24,999	25.3	29.2	26.8	26.4	14.8	16.9	14.3	10.8
25,000-49,999	30.9	30.0	31.3	29.6	26.3	26.7	28.1	26.4
50,000-99,999	21.4	19.2	19.9	23.8	31.3	30.0	31.0	33.0
100,000 or more	5.8	5.2	5.5	6.4	25.1	23.4	21.3	25.3
<i>Net worth of household (dollars)</i>								
Less than 50,000	50.9	53.1	50.5	47.4	15.7	16.9	14.0	14.6
50,000-99,999	14.9	15.3	16.6	14.7	9.2	10.7	13.7	10.7
100,000-249,999	20.3	20.7	20.0	20.4	23.2	27.5	30.8	21.1
250,000-499,999	9.0	6.9	7.6	11.1	17.9	15.7	13.8	20.3
500,000-999,999	3.2	2.5	3.8	4.0	15.1	14.1	13.0	15.9
1,000,000-2,499,999	1.2	1.1	1.2	1.8	12.0	9.6	8.3	9.1
2,500,000-4,999,999	0.3	0.3	0.2	0.4	4.0	3.5	3.2	4.7
5,000,000-9,999,999	0.0	0.0	0.1	0.1	2.1	1.5	2.0	2.4
10,000,000 or more	0.0	0.0	0.0	0.0	0.9	0.6	1.1	1.2

Table 1.1 Profile of the Characteristics of Non-Business and Business Owning Families, 1989-1998 (continued)

Weighted Means

Family Characteristic	Non-Business Owning Families				Business Owning Families			
	1989	1992	1995	1998	1989	1992	1995	1998
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<i>Marital status of household head</i>								
Married or living with a partner	55.2	54.1	55.9	55.1	77.2	78.4	76.2	82.9
Previously married	30.6	30.5	29.2	28.8	14.8	12.8	15.5	10.3
Never married	14.2	15.4	14.9	16.1	8.0	8.8	8.3	6.8
<i>Census region</i>								
Northeast	--	20.3	19.8	19.4	--	19.5	19.7	18.1
Northcentral	--	24.3	24.1	23.8	--	24.9	23.1	23.2
South	--	35.4	35.1	35.9	--	29.2	35.1	35.4
West	--	19.9	21.0	20.9	--	26.4	22.1	23.3
Observations	2,216	2,640	3,000	3,028	927	1,266	1,299	1,277

Table 1.2 Profile of the Sources of Income and Wealth Held by Non-Business and Business Owning Families, 1989-1998

Weighted Means

Family Characteristic	Non-Business Owning Families				Business Owning Families			
	1989	1992	1995	1998	1989	1992	1995	1998
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<i>Structure of income</i>								
Wages and salaries	72.3	71.1	72.5	73.8	79.6	80.9	79.4	85.0
Professional practice	3.4	4.7	3.9	3.7	60.8	53.0	56.8	58.5
Non-taxable investments	4.4	4.4	3.9	3.0	8.8	10.3	11.0	6.9
Other interest income	39.6	37.5	28.4	28.7	55.4	55.5	51.0	41.8
Dividends	15.0	15.6	14.6	14.4	28.9	26.7	30.1	27.5
Sale of stocks/bonds/r.estate	7.9	6.9	6.2	9.6	17.4	15.5	19.6	21.1
Net rent/trust/royalties	8.1	7.1	6.0	5.5	19.4	22.9	19.5	16.3
Unemploy. or worker's comp.	6.1	6.2	6.0	4.9	2.7	5.5	3.0	1.5
Child support or alimony	4.9	3.9	6.0	5.6	3.1	2.2	3.3	2.4
Welfare, foodstamps, etc.	11.4	9.9	11.6	7.9	1.4	1.7	2.7	1.0
SocSec, pension, retire., etc.	32.3	31.6	32.0	30.0	16.7	18.4	16.4	16.8
Other sources	5.9	3.9	3.7	2.9	2.7	7.2	5.5	3.4
<i>Structure of wealth</i>								
Checking accounts	72.9	74.4	78.6	79.2	89.7	89.9	92.0	91.2
Savings accounts	42.9	42.5	35.5	55.0	44.0	52.8	39.2	61.2
Money market deposit accts	16.9	15.7	12.9	12.4	26.3	23.6	21.9	20.0
Money market mutual funds	5.2	5.3	4.8	5.3	11.3	11.0	12.7	13.9
Total money market accts*	20.5	19.5	16.4	16.7	35.0	30.7	29.7	30.3
Call accounts	1.0	1.4	1.1	1.8	3.8	5.0	5.1	4.1
Transaction accounts*	83.6	84.9	85.5	89.1	97.5	98.6	97.0	98.3
Certificates of deposit	24.8	21.4	17.9	18.5	35.9	26.8	26.2	18.5
Stock mutual funds	3.6	5.6	8.8	13.3	8.4	11.0	20.0	25.7
Tax-free bond mutual funds	1.1	2.6	2.4	3.5	3.8	4.1	7.7	4.4
Government bond mutual funds	1.2	2.0	1.6	1.4	1.3	2.7	3.3	2.5
Other bond mutual funds	0.4	0.9	1.2	1.6	0.9	2.2	2.6	3.0
Combination and other mf	1.9	2.2	2.2	1.8	3.0	6.9	2.6	4.5
Total directly-held mf*	6.3	9.1	10.7	15.0	13.2	17.8	23.0	28.2

Table 1.2 Profile of the Sources of Income and Wealth Held by Non-Business and Business Owning Families, 1989-1998 (continued)

Weighted Means

Family Characteristic	Non-Business Owning Families				Business Owning Families			
	1989	1992	1995	1998	1989	1992	1995	1998
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Stocks	17.6	18.7	19.9	25.1	35.4	37.5	36.5	46.5
Non-taxable bonds	2.9	1.7	1.3	1.3	6.7	5.0	5.0	3.6
Mortgage bonds	0.6	0.5	0.4	0.6	1.0	1.2	1.2	0.4
Government bonds	1.4	1.0	0.9	0.7	3.5	2.3	2.5	3.3
Other bonds	1.4	1.5	0.8	0.9	3.4	3.1	2.1	2.0
Total bonds*	8.5	5.3	5.1	5.3	13.8	11.0	11.4	9.4
Thrift-type plans	18.7	20.1	26.6	31.0	19.9	22.8	22.5	32.2
Thrift amounts invested stock	12.1	13.7	21.4	25.8	12.6	16.5	19.5	28.3
Future pensions	3.3	3.5	5.3	2.5	5.6	3.1	3.3	3.9
Total of IRAs and thrifs*	20.9	22.7	29.5	32.4	24.6	25.2	25.0	34.9
Savings bonds	22.9	21.1	21.2	18.4	30.5	29.1	32.4	26.4
Cash value of whole life ins	32.8	33.7	30.1	28.1	51.4	44.6	44.7	39.9
Annuities	--	--		4.5	--	--	--	5.6
Trusts	--	--		1.3	--	--	--	4.5
Other managed assets*	3.7	4.0	4.0	5.5	4.0	4.2	3.7	9.5
Other financial assets	15.8	14.8	14.3	13.6	24.4	26.5	25.8	22.9
Total financial assets*	87.3	88.7	89.7	92.2	98.5	99.6	99.2	98.5
Vehicles	82.1	84.4	83.0	81.6	94.5	95.9	91.3	91.6
Primary residence	61.4	61.1	62.5	63.8	80.2	81.1	79.8	83.2
Other residential real estate	11.1	10.7	9.8	11.1	26.0	24.3	24.9	26.6
Net equity in nonres r estate	8.9	7.5	7.3	6.7	24.4	20.8	21.8	19.3
Business interests	0.0	0.0	0.0	0.0	88.0	81.7	87.7	90.3
Other nonfinancial	10.9	7.1	7.9	7.7	22.1	16.0	16.7	14.4
Total nonfinancial*	87.7	89.3	89.6	88.5	99.3	99.8	99.7	99.7
Total nonfin minus primary res*	83.7	85.2	84.6	83.3	99.3	99.0	98.8	99.4
Total assets*	93.9	95.2	95.8	96.4	100.0	100.0	100.0	100.0
Housing debt	37.0	35.5	38.6	39.9	55.9	60.9	56.7	65.1
Other lines of credit	2.8	1.9	1.5	2.0	5.2	4.9	4.3	4.1
Debt for other residential prop	4.3	4.4	4.0	4.3	10.6	14.8	10.7	11.2
Credit card debt	40.7	42.5	47.1	42.8	34.6	50.6	48.1	50.9
Installment loans	48.5	45.4	45.2	43.3	54.7	50.3	51.5	46.8
Other debts	5.5	7.6	8.3	8.0	11.8	10.2	8.9	8.8
Total debt*	71.0	70.9	72.8	71.9	80.1	87.3	85.8	87.5
Total net worth*	86.7	87.9	89.1	88.0	98.7	97.6	98.3	98.0

Table 1.2 Profile of the Sources of Income and Wealth Held by Non-Business and Business Owning Families, 1989-1998 (continued)

<u>Weighted Means</u>								
Family Characteristic	Non-Business Owning Families				Business Owning Families			
	1989 (%)	1992 (%)	1995 (%)	1998 (%)	1989 (%)	1992 (%)	1995 (%)	1998 (%)
<i>Debt structure, lender</i>								
Commercial bank	39.6	40.1	43.1	41.5	52.6	57.5	55.0	57.9
Savings and loan	25.6	20.5	20.5	21.4	32.0	29.1	26.2	26.6
Finance company	17.5	17.3	23.2	27.8	16.7	21.5	25.7	31.8
Other institution	21.1	19.7	14.6	12.2	21.3	26.1	17.5	19.1
Credit card company	3.2	6.2	6.8	5.9	3.6	7.9	8.0	8.5
Family	6.8	6.3	4.4	4.6	12.3	8.0	8.5	4.7
Government	3.3	3.0	4.3	1.7	4.0	3.4	6.0	2.4
Other	28.9	24.8	24.5	20.7	22.4	28.5	23.2	22.1
Unclassified	6.2	14.5	16.0	13.0	15.3	19.0	15.7	15.0
<i>Debt structure, type of loan</i>								
Credit card	40.7	42.5	47.1	42.8	34.6	50.6	48.1	50.9
Line of credit	5.6	5.4	4.0	5.8	10.1	13.5	9.8	11.6
Mortgage	39.4	37.7	40.1	43.3	59.1	65.2	61.2	67.4
Vehicle	34.2	29.6	32.1	32.9	40.2	33.7	34.6	35.9
Business	8.7	6.2	5.9	0.0	11.9	8.3	7.0	0.0
Other	21.5	18.4	15.1	11.6	25.5	17.6	15.4	16.2
Education	0.0	10.6	11.5	11.2	0.0	9.5	14.2	11.4

Table 2.0 Probability of Being a High Income (>\$50,000) or High Net Worth (>\$1 million) Family

High Income/Business and Non-Business Owning Families												
Owned Stocks	1989			1992			1995			1998		
	Business	Business	All	Business	Business	All	Business	Business	All	Business	Business	All
Yes	83.9	57.1	63.4	76.5	54.0	59.6	76.5	50.5	56.0	73.2	57.2	60.6
No	41.2	20.7	22.9	39.7	17.5	20.0	38.5	19.1	21.1	45.3	21.1	23.4
All	56.4	27.1	31.0	53.5	24.3	28.5	52.3	25.4	28.8	58.2	30.2	33.8

High Net Worth/Business and Non-Business Owning Families												
Owned Stocks	1989			1992			1995			1998		
	Business	Business	All	Business	Business	All	Business	Business	All	Business	Business	All
Yes	30.1	7.6	12.4	27.5	5.6	10.3	29.2	6.1	11.9	35.6	6.7	13.5
No	6.4	0.7	1.2	7.3	0.4	1.2	6.8	0.4	1.2	9.7	0.5	1.5
All	17.4	2.4	4.3	14.7	1.5	3.2	15.2	1.5	3.5	18.9	1.6	3.9

non-business owning families. In addition, business owning families who hold stock are about twice as likely as business owning families not holding stock to be high income. The wealth picture is even more dramatic. Business owning families are over six times more likely to be millionaires than non-business owning families and business owning families who hold stock are much more likely to be millionaires than those who do not hold stock. In summary, business owning families who hold stock are those most likely to be classified as high income and high wealth families.

Business owning families who are primarily investors have the highest probability of being classified as high income families among all business owning families (Table 2.1). In 1998, families with an angel capitalist in the household had a substantially higher probability of being classified as a high income household than a family with a self-employed business owner (68.8 versus 43.7 percent). Families owning self-employed businesses are the least likely to be classified as high income among all business owning families. As businesses get larger (either in terms of the number of employees or gross sales) and older, the families owning these businesses are more likely to be classified as high income. Families owning corporations are more likely to be classified as high income than families owning businesses using other legal organizations. Families owning agricultural businesses are less likely to be classified as high income than other businesses, while families owning service business are most likely to be classified as high income. Finally, the method used to acquire the business doesn't appear to impact the probability of being high income.

The picture is very similar for those families classified as high wealth (Table 2.2). Business owning families, who are primarily investors, have the highest probability of being classified as high wealth among all business owning families (29.7 percent for angel capitalist and 60.9 percent for other angels in 1998). Families owning larger, older and corporate (sub-s or regular corporations) businesses are most likely to be classified as high wealth. Families owning firms engaged in the service industry are most likely to be classified as high wealth. In general, families who have inherited businesses are more likely to be classified as high wealth than other types of business owners.

In summary, those families owning small businesses and holding stocks are more likely than other families to have total family incomes exceeding \$50,000 each year and wealth accumulations exceeding \$1 million. Families owning larger and older businesses are more likely to be classified as high income and high wealth than other families.

Mean and Median Income

The seemingly robust economy of the 1990s has produced a higher percentage of high income (31.0 percent in 1989 to 33.8 percent in 1998) and high wealth (3.9 percent in 1989 to 4.3 percent in 1998) families since 1989. However, variations in income and wealth are often large. Table 3.0 compares mean family incomes by selected personal, demographic and business characteristics from 1992 through 1998. In all cases, mean and median family income was higher in 1989 than in 1992. Hence, this report will discuss the changes in income from the recession in the early 1990's to the most recent data collected in 1998. All income figures have been adjusted to 1998 dollars using the current Consumer Price Index (CPI) as employed by Kennickell and Starr-McCluer

Table 2.1 Probability of Being a High Income Family

Business Characteristics	1989			1992			1995			1998		
	Stock	No Stock	All									
All Families	63.4	22.9	31.0	59.6	20.0	28.5	56.0	21.1	28.8	60.6	23.4	33.8
No Business	57.1	20.7	27.1	54.0	17.5	24.3	50.5	19.1	25.4	57.2	21.1	30.2
All Business	83.9	41.2	56.4	76.5	39.7	53.5	76.5	38.5	52.3	73.2	45.3	58.3
Self-employed	81.5	39.2	48.1	64.6	33.7	41.5	71.4	33.4	45.4	62.6	28.8	43.7
Small business	82.3	41.4	55.5	79.7	45.5	59.8	75.8	41.5	54.4	77.8	54.4	64.5
Angel	88.2	33.1	60.6	69.0	33.5	49.9	86.0	40.0	58.6	76.1	56.3	68.8
Other Angel	88.2	99.1	91.3	95.7	48.9	81.7	89.2	48.9	71.3	84.5	21.4	77.5
Small Businesses Only	82.2	40.8	53.5	75.2	39.9	52.2	74.1	37.9	50.6	72.0	44.9	56.7
Small Business (SE/SBM)												
Employees, 0 to 1	81.5	39.2	48.1	64.6	33.7	41.5	71.4	33.4	45.4	62.6	28.8	43.7
Employees, 2 to 4	80.9	35.5	48.8	72.8	39.3	52.9	72.0	33.1	45.4	70.3	51.7	58.5
Employees, 5 to 9	73.5	41.2	51.7	75.9	39.7	54.5	61.8	45.5	53.4	81.1	50.6	64.8
Employees, 10 to 24	88.3	87.0	87.8	99.4	65.4	76.2	93.0	64.7	75.7	81.5	85.8	83.2
Employees, 25 or more	97.6	78.7	90.2	98.4	73.4	88.1	99.6	95.0	97.8	99.7	73.4	90.9
Age, less than 1 year	51.6	39.3	41.7	81.2	50.4	61.0	67.5	43.0	48.3	68.5	18.0	31.3
Age, 1 to 4	72.6	28.5	38.8	74.0	34.5	47.8	62.5	40.7	48.2	69.5	40.9	50.6
Age, 5 to 9	86.7	49.7	63.4	73.0	37.2	48.2	76.8	36.7	50.4	74.7	48.9	59.8

Table 2.1 Probability of Being a High Income Family (continued)

Business Characteristics	1989			1992			1995			1998		
	Stock	No Stock	All	Stock	No Stock	All	Stock	No Stock	All	Stock	No Stock	All
Age, 10 to 19	91.4	51.3	64.3	72.5	55.4	61.9	77.6	40.5	55.0	72.4	47.9	61.0
Age, 20 or more	81.7	43.8	58.6	79.8	29.0	49.0	86.9	27.9	50.2	72.3	57.0	65.1
Partnership	75.1	30.9	44.8	84.5	40.8	59.3	77.6	37.0	49.3	64.3	49.0	54.8
Sole proprietorship	78.3	42.2	50.2	67.2	36.0	44.7	70.4	34.2	45.5	68.5	38.5	50.2
Corporation, sub-s	94.7	70.8	83.1	76.1	43.4	60.2	75.9	50.8	62.7	80.4	54.8	68.8
Corporation, general	90.7	41.0	70.2	87.1	62.4	74.0	83.1	58.2	71.8	79.9	64.7	73.9
Agriculture	70.0	30.2	37.6	78.3	25.7	38.2	76.8	28.9	41.0	46.7	23.1	33.0
Construction/Manufacturing	92.3	34.7	52.2	97.6	33.6	50.9	78.0	39.8	49.0	68.1	38.2	48.6
Wholesale/Retail	70.6	40.9	51.3	54.2	30.5	41.4	69.3	33.7	49.1	67.5	33.9	49.4
Services	87.3	52.3	64.7	78.6	49.3	60.0	74.6	42.9	55.8	79.7	57.8	68.2
Bought/Invested	59.0	41.4	46.5	78.9	36.9	51.9	79.0	40.2	53.1	70.3	52.0	60.1
Started	88.1	40.6	55.2	73.3	41.6	52.5	72.6	37.4	49.9	74.2	42.4	56.1
Inherited	93.6	40.5	58.8	81.6	29.5	49.1	77.0	35.7	49.8	52.3	48.8	50.3
Sales, less than \$50,000	71.8	30.5	40.0	60.3	33.6	41.3	68.8	30.2	40.4	33.0	53.5	39.8
Sales, 50,000 - 99,999	90.5	54.0	64.2	87.6	29.2	46.0	66.9	36.8	48.9	70.7	72.0	71.2
Sales, 100,000 - 249,999	80.9	36.1	50.5	77.9	45.2	57.6	68.7	50.4	58.4	50.4	71.5	61.3
Sales, 250,000 - 499,999	73.7	64.6	68.4	84.8	67.6	76.2	92.0	77.1	84.8	70.9	88.8	81.0
Sales, 500,000 - 999,999	100.0	71.9	82.3	98.9	72.3	81.5	90.3	54.0	76.4	41.5	95.4	70.2
Sales, 1,000,000 - 2,499,999	100.0	59.0	77.4	90.0	66.0	80.3	76.8	78.3	77.4	98.7	91.9	93.9

Table 2.1 Probability of Being a High Income Family (continued)

Business Characteristics	1989			1992			1995			1998		
	Stock	No Stock	All	Stock	No Stock	All	Stock	No Stock	All	Stock	No Stock	All
Sales, 2,500,000 - 4,999,999	100.0	99.9	100.0	100.0	92.7	94.8	98.9	96.1	97.9	99.8	99.4	99.5
Sales, 5,000,000 - 9,999,999	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.1	95.6	100.0	100.0	100.0
Sales 10,000,000 or more	100.0	92.9	96.3	99.9	70.4	94.3	99.9	95.2	97.9	100.0	100.0	100.0
Observations	264	306	570	498	445	943	540	428	968	635	377	1,012

Notes:

- (1) Income and net worth are computed in 1998 dollars using current CPI (Kennickell & Starr-McCluer, 2000).
- (2) Some cells have fewer than 10 observations.

Table 2.2 Probability of Being a High Wealth Family

Business Characteristics	1989			1992			1995			1998		
	Stock	No Stock	All									
All Families	13.5	1.5	3.9	11.9	1.2	3.5	10.3	1.2	3.2	12.4	1.2	4.3
No Business	6.7	0.5	1.6	6.1	0.4	1.5	5.7	0.4	1.5	7.6	0.7	2.4
All Business	35.6	9.7	18.9	29.2	6.8	15.2	27.5	7.3	14.7	30.1	6.4	17.4
Self-employed	22.9	7.4	10.7	15.1	0.7	4.3	12.9	2.2	5.6	14.2	2.3	7.5
Small business	30.0	9.7	16.7	27.7	11.5	18.3	33.8	11.0	19.5	32.8	8.7	19.2
Angel	43.5	5.3	24.3	42.9	2.5	21.1	33.6	6.1	17.2	43.6	6.2	29.7
Other Angel	69.6	59.2	66.7	62.7	36.6	54.9	38.0	15.6	28.1	66.1	19.4	60.9
Small Businesses Only	28.7	9.0	15.1	23.9	6.4	12.5	25.8	7.1	13.6	25.7	6.3	14.8
Small Business (SE/SBM)												
Employees, 0 to 1	22.9	7.4	10.7	15.1	0.7	4.3	12.9	2.2	5.6	14.2	2.3	7.5
Employees, 2 to 4	13.5	2.4	5.6	14.6	6.2	9.6	20.8	4.1	9.4	19.7	3.3	9.3
Employees, 5 to 9	25.2	17.3	19.9	31.4	11.3	19.5	27.7	20.1	23.8	20.0	8.1	13.7
Employees, 10 to 24	45.3	54.2	49.1	51.0	21.9	31.1	57.9	18.5	33.7	75.9	52.9	66.7
Employees, 25 or more	97.1	24.2	68.5	57.8	34.7	48.3	76.1	67.2	72.7	72.6	36.3	60.5
Age, less than 1 year	14.4	0.0	2.9	7.8	0.0	2.7	21.0	4.2	7.9	23.9	0.0	6.3
Age, 1 to 4	12.6	6.7	8.0	6.5	2.9	4.1	15.0	3.0	7.1	13.2	0.3	4.7

Table 2.2 Probability of Being a High Wealth Family (continued)

Business Characteristics	1989			1992			1995			1998		
	Stock	No Stock	All	Stock	No Stock	All	Stock	No Stock	All	Stock	No Stock	All
Age, 5 to 9	20.1	4.2	10.1	19.2	4.3	8.9	23.2	6.4	12.1	22.6	6.1	13.1
Age, 10 to 19	28.3	10.0	15.9	33.0	10.0	18.8	24.2	12.2	16.9	27.3	10.3	19.4
Age, 20 or more	64.9	25.1	40.7	48.8	14.2	27.8	50.9	10.9	26.1	42.7	19.7	31.8
Partnership	17.3	7.3	10.5	28.8	10.6	18.3	22.9	6.9	11.8	22.2	10.1	14.6
Sole proprietorship	21.2	6.8	10.0	19.0	2.8	7.3	16.2	3.6	7.5	17.6	3.2	8.8
Corporation, sub-s	58.6	24.8	42.2	27.8	15.0	21.6	41.8	21.3	31.0	34.0	8.3	22.3
Corporation, general	39.3	23.9	32.9	29.4	18.4	23.6	48.0	19.8	35.2	43.1	18.0	33.2
Agriculture	22.9	14.0	15.6	37.8	4.7	12.5	32.0	6.3	12.8	16.9	6.2	10.7
Construction/Manufacturing	22.7	3.7	9.5	26.8	5.4	11.2	30.5	6.9	12.6	14.9	2.5	6.8
Wholesale/Retail	23.2	12.2	16.1	12.7	6.2	9.2	21.6	5.9	12.7	11.3	4.7	7.8
Services	37.2	6.9	17.6	26.2	7.3	14.1	24.9	8.1	14.9	36.1	9.3	22.0
Bought/Invested	37.8	9.0	17.4	35.0	8.6	18.0	39.8	12.0	21.3	22.0	6.3	13.3
Started	25.4	5.3	11.5	18.1	5.5	9.9	21.9	5.2	11.1	25.4	6.2	14.5
Inherited	29.5	32.4	31.4	46.7	7.6	22.2	29.3	11.4	17.5	43.7	8.0	24.0
Sales, less than \$50,000	7.1	5.8	6.1	8.7	1.7	3.8	10.4	1.9	4.2	10.4	1.4	4.4
Sales, 50,000 - 99,999	15.1	7.8	9.9	27.3	3.8	10.5	20.6	7.0	12.4	12.9	1.7	6.7
Sales, 100,000 - 249,999	21.7	1.0	7.6	23.3	9.4	14.6	20.4	5.9	12.3	19.1	7.4	13.4
Sales, 250,000 - 499,999	42.2	10.9	23.8	26.6	8.7	17.6	43.9	30.5	37.4	42.9	21.0	33.3
Sales, 500,000 - 999,999	83.7	20.3	43.6	62.8	12.2	29.7	45.9	45.5	45.8	39.1	12.8	26.8

Table 2.2 Probability of Being a High Wealth Family (continued)

Business Characteristics	1989			1992			1995			1998		
	Stock	No Stock	All	Stock	No Stock	All	Stock	No Stock	All	Stock	No Stock	All
Sales, 1,000,000 - 2,499,999	88.7	52.4	68.7	71.3	58.5	66.1	53.3	36.4	46.3	54.6	64.7	57.6
Sales, 2,500,000 - 4,999,999	21.2	27.7	22.7	100.0	46.4	62.0	98.4	63.6	86.8	50.7	70.3	54.3
Sales, 5,000,000 - 9,999,999	54.8	100.0	57.1	35.0	58.5	41.6	90.7	45.7	65.9	87.3	14.4	55.4
Sales 10,000,000 or more	92.5	91.8	92.1	52.7	64.2	54.9	78.3	64.3	72.3	90.5	90.7	90.5
Observations	264	306	570	498	445	943	540	428	968	635	377	1,012

Notes:

(1) Income and net worth are computed in 1998 dollars using current CPI (Kennickell & Starr-McCluer, 2000).

(2) Some cells have fewer than 10 observations.

Table 3.0 Summary of Changes in Mean Household Income by Selected Characteristics

Mean Household Income in 1998 dollars

Characteristic	Mean Household Income				Percent Change 92-98
	1992	'92 Income Index ¹	1998	'98 Income Index ¹	
Mean Income, Total Sample	45,576	100.0	53,121	100.0	16.6
No Business	38,077	83.5	43,999	82.8	15.6
All Business	90,682	199.0	115,629	217.7	27.5
Self-employed	59,611	130.8	65,010	122.4	9.1
Owner manager	100,693	220.9	123,718	232.9	22.9
Angel capitalist	100,708	221.0	149,248	281.0	48.2
Other angel	202,437	444.2	423,793	797.8	109.3
Stock owners	86,979	190.8	96,977	182.6	11.5
Non-business owners	68,228	149.7	74,324	139.9	8.9
Business owners	143,331	314.5	180,940	340.6	26.2
Non-stock owners	34,313	75.3	36,181	68.1	5.4
Non-business owners	31,136	68.3	33,812	63.7	8.6
Business owners	59,152	129.8	58,890	110.9	-0.4
Small Businesses Only					
All Small Businesses	83,613	183.5	101,563	191.2	21.5
Employees, 0 - 1	59,611	130.8	65,010	122.4	9.1
Employees, 2 - 4	72,533	159.1	81,667	153.7	12.6
Employees 5 - 9	97,064	213.0	124,636	234.6	28.4
Employees 10 - 24	141,774	311.1	164,168	309.0	15.8
Employees, 25+	211,098	463.2	395,981	745.4	87.6
Business age, less than 1 year	64,792	142.2	66,791	125.7	3.1
Business age, 1 - 4	65,536	143.8	75,932	142.9	15.9
Business age, 5 - 9	85,493	187.6	98,359	185.2	15.0
Business age 10 - 19	103,510	227.1	117,311	220.8	13.3
Business age 20+	94,743	207.9	140,605	264.7	48.4
Legal organization, Partner	109,160	239.5	104,450	196.6	-4.3
Legal organization, sole proprietor	65,348	143.4	69,315	130.5	6.1
Legal organization, corporation - sub s	115,910	254.3	169,544	319.2	46.3
Legal organization, corporation - sub c	116,003	254.5	170,237	320.5	46.8
Industry, agriculture	58,576	128.5	57,364	108.0	-2.1
Industry, construction, manufacturing	81,993	179.9	79,580	149.8	-2.9
Industry, wholesale, retail	63,827	140.0	76,789	144.6	20.3
Industry, services, other	97,395	213.7	129,206	243.2	32.7
Industry, unclassified	n.a.	n.a.	n.a.	n.a.	n.a.
Founding status, bought, invested	92,367	202.7	101,153	190.4	9.5
Founding status, started	80,453	176.5	100,189	188.6	24.5
Founding status, inherited, other	85,890	188.5	120,681	227.2	40.5

¹ Income index = (mean income for each group)/(mean income for the population)x100.

(1997). When comparing real mean family income from 1992 through 1998, no statistically significant differences are found for any group except small businesses with 25 or more employees. A further breakdown of this group into stock holding and non-stock holding family businesses, suggests that no statistical differences exist in mean family income.

Table 3.0 summarizes changes in mean real income for families owning and not owning businesses. While mean household income appeared to increase by over 16 percent from 1992 through 1998, business owning families appeared to realize a higher percentage change than other (non-business owning) families (27.5 percent versus 15.6 percent). In 1998, non-business owning families had 82.8 percent of average income, while business owning families had over two times (index of 217.7) the average income of all families. On average, business investors and those owning and investing in businesses realized the highest increases in income. Business owning families that also held publicly traded stock did much better than those with no stock holdings (26.2 percent increase versus 0.4 percent decline). Larger, older, corporate, service and inherited businesses seemed to realize higher percentage changes in income than other small businesses.

Families without any business ownership appear to have realized statistically significant increases in income from 1992 to 1998 (\$38,077 to \$43,999 increase in real mean income). Even though, mean income increased from \$90,682 to \$115,629, no statistically significant difference was found for business owners. In fact, no significant differences were identified for any type of business owner (self-employed, owner/manager, angel capitalist or other angel capitalist). Families with stock holdings have significantly higher incomes than those without stock holdings for both business and non-business owning families. However, neither group of stock holding families had significantly higher mean income in 1998 than in 1992. Additional information for families with and without stock holdings is reported in Appendix Tables 3.11 and 3.12, respectively.

Small business owners as a group have realized an increase in mean income (a non-statistically significant increase from \$83,613 to \$101,563) however, median income has actually fallen from \$53,806 to \$52,702 (Appendix Table 3.2). Family income appears to have trended upward during this period of time (1992 through 1998), however these increases were not statistically significant except for the largest business owners (25 or more employees), who saw mean family income increase significantly from \$211,098 to \$395,981.

When mean and median family incomes are separated by business age, legal organization, industrial classification and founding status, no statistically significant differences are found. Partnerships and firms engaged in agriculture, construction and manufacturing actually realized declines in mean income from 1992 to 1998. In general, family income appears to have been trending upward from 1992 to 1998. However, given the high variance in income data no statistically significant changes were shown except for the largest small businesses.

Appendix Tables 3.2 through 3.62 examine the changes in mean and median income for small business owners by business size (Tables 3.2 through 3.22), age (Tables 3.3 through 3.32), legal organization (Tables 3.4 through 3.42), industrial classification (Tables 3.5 through 3.52) and founding status (Tables 3.6 through 3.62).

In summary, families owning small businesses and holding stock have higher mean and median income than other families. Among business owning families, only families owning the largest business and holding stock realized a statistically significant increase in mean income. In general, families owning larger, older, corporate, service industry and inherited small businesses realized higher percentage increases in real mean income than other families owning small businesses.

Mean and Median Wealth

Table 4.0 summarizes the changes in mean household wealth from 1992 through 1998. These changes in wealth were consistent with changes in income. Inflation adjusted mean household wealth increased by about 34 percent. Families owning businesses seemed to realize higher percentage increases in wealth than families not owning a business (42.6 percent versus 37.3). In 1998, non-business owning families held just over 61 percent of the average wealth of all families. Business owning families held over 3.5 (index of 362.9) times the average wealth of all families. All business owners exceeded the average percentage increase in wealth, except owner managers. Business owning stockholders realized substantially larger gains than business owning families without any stock holdings (39.4 percent increase versus 0.1 percent decline). Larger, corporate, service industry and owner started small businesses appear to have realized larger percentage increases in wealth than other small businesses.

Families with business ownership had significantly higher wealth in all time periods than families without any business ownership, however families without businesses appear to have increased their wealth more than families with business ownership from 1992 to 1998. Families without any business ownership realized a statistically significant increase in real mean family wealth from \$125,164 to \$171,904 and real median family wealth increased from \$42,814 to \$59,000 (Appendix Table 4.1). Families who owned businesses realized an upward trend in family wealth from \$709,659 to \$1,011,924, however this increase was not statistically significant. Median family wealth increased for families with no business ownership and for each type of business owner (Appendix Table 4.1). Stockholders had significantly higher wealth than non-stockholders for both business and non-business owning families. However, no statistically significant differences in family wealth were realized by any of these stockholding and non-stockholding groups. Similar results are reported for those small business with and without stock holdings.

When considering families owning only small businesses firms, families owning larger, corporate, service industry and businesses started by a family member realized the largest percentage increases in wealth. However, when mean family wealth is separated by business age, legal organization, industrial classification and founding status groups, no statistically significant differences are found. Mean family wealth declined for only one group of firms, those engaged in construction or manufacturing.

Appendix Tables 4.2 through 4.62 examine the changes in mean and median wealth for small business owners by business size (Tables 4.2 through 4.22), age (Tables 4.3 through 4.32), legal organization (Tables 4.4 through 4.42), industrial classification (Tables 4.5 through 4.52) and founding status (Tables 4.6 through 4.62).

Table 4.0 Summary of Changes in Mean Household Net Worth by Selected Characteristics

Mean Household Net Worth in 1998 dollars

Characteristic	Mean Household Net Worth				Percent Change 92-98
	1992	'92 Wealth Index ¹	1998	'98 Wealth Index ¹	
Mean Net Worth, Total Sample	208,480	100.0	278,876	100.0	33.8
No Business	125,164	60.0	171,904	61.6	37.3
All Business	709,659	340.4	1,011,924	362.9	42.6
Self-employed	257,118	123.3	450,616	161.6	75.3
Owner manager	822,627	394.6	1,063,989	381.5	29.3
Angel capitalist	983,427	471.7	1,759,360	630.9	78.9
Other angel	2,495,442	1197.0	4,172,997	1496.4	67.2
Stock owners	562,985	270.0	688,600	246.9	22.3
Non-business owners	339,020	162.6	409,444	146.8	20.8
Business owners	1,236,084	592.9	1,723,308	617.9	39.4
Non-stock owners	112,045	53.7	120,618	43.3	7.7
Non-business owners	75,930	36.4	92,109	33.0	21.3
Business owners	394,393	189.2	393,898	141.2	-0.1
Small Businesses Only					
All Small Businesses	587,519	281.8	832,514	298.5	41.7
Employees, 0 - 1	257,118	123.3	450,616	161.6	75.3
Employees, 2 - 4	471,165	226.0	536,061	192.2	13.8
Employees 5 - 9	766,370	367.6	872,449	312.8	13.8
Employees 10 - 24	1,213,774	582.2	2,072,016	743.0	70.7
Employees, 25+	2,329,978	1117.6	4,530,685	1624.6	94.5
Business age, less than 1 year	209,348	100.4	279,246	100.1	33.4
Business age, 1 - 4	276,936	132.8	392,560	140.8	41.8
Business age, 5 - 9	492,199	236.1	759,451	272.3	54.3
Business age 10 - 19	776,103	372.3	1,019,765	365.7	31.4
Business age 20+	1,163,404	558.0	1,657,084	594.2	42.4
Legal organization, Partner	793,216	380.5	1,010,581	362.4	27.4
Legal organization, sole proprietor	361,253	173.3	447,735	160.5	23.9
Legal organization, corporation - sub s	1,090,984	523.3	1,526,547	547.4	39.9
Legal organization, corporation - sub c	1,048,290	502.8	1,569,909	562.9	49.8
Industry, agriculture	533,335	255.8	754,240	270.5	41.4
Industry, construction, manufacturing	629,624	302.0	556,226	199.5	-11.7
Industry, wholesale, retail	485,085	232.7	644,439	231.1	32.9
Industry, services, other	623,236	298.9	1,009,741	362.1	62.0
Industry, unclassified	n.a.	n.a.	n.a.	n.a.	n.a.
Founding status, bought, invested	728,241	349.3	936,066	335.7	28.5
Founding status, started	505,951	242.7	774,222	277.6	53.0
Founding status, inherited, other	1,031,610	494.8	1,161,723	416.6	12.6

¹ Wealth index = (mean wealth for each group)/(mean wealth for the population)x100.

In summary, families owning businesses realized higher percentage increases in real mean and median wealth than families not owning a business. Real mean wealth trended upward for most groups of small business owners, however no statistically significant increase in real mean wealth was found for any group. Families owning larger, older, corporate, service industry and owner started small businesses appear to have realized larger percentage increases in real mean wealth than other small businesses from 1992 to 1998.

Shares of Income

The previous section examined changes in mean and median family income and wealth between 1992 and 1998 and found significant increases only for families owning larger businesses. This section examines aggregate income and wealth and assesses changes in the total income and wealth accumulations for business and non-business owning families. In order to be consistent with the analysis of mean and median family income and wealth, this analysis will consider changes from 1992 to 1998. The unit of observation is all families belonging to a specific group in each time period. Aggregate income within the group may increase over time because either the group has become larger or group members have higher income.

Aggregate family income increased by about 25 percent between 1992 and 1998 (Table 5.0). Families with no business ownership realized higher percentage changes in aggregate income than families with some business ownership (25.7 percent versus 21.8 percent). Business investors (angel capitalists and other angels) realized much larger percentage increases in aggregate income than other business owners. Business owners with stock holdings realized substantially higher increases in aggregate income than business owners without stock holdings (49.7 percent increase versus 18.6 percent decline). Families with mid-sized, older, corporate and inherited businesses engaged in either construction, manufacturing or services realized larger increases in aggregate income than other small businesses.

Families owning businesses comprise about 15 percent of all families and generate over 25 percent of total family income (Table 5.0). Families owning no businesses comprise about 85 percent of total families and generate just over 70 percent of aggregate family income. The share of total family income held by families owning no businesses increased slightly from 71.6 to 72.3 percent from 1992 to 1998. Although total family income increased by over \$1.0 trillion in this sample, business owners earned a smaller share of total family income in 1998 than in 1992 (27.7 percent versus 28.4 percent). The most substantial decline occurred for families with self-employed businesses, where their share of total income declined from 6.8 to 5.2 percent. Angel capitalists and business owners doing some angel capital investing increased their share of total family income from 3.4 percent in 1992 to 6.1 percent in 1998.

Stock holding became more prevalent (non-business owning families holding stock rose from 18.7 to 25.1 percent and business owning families holding stock rose from 37.5 to 46.5 percent) and larger amounts of money were invested (Table 1.2). Nearly 41 percent of aggregate income was held by stockholders in 1992, which increased to over 50 percent by 1998 (Table 5.1). The percentage of aggregate income held by all business types, except self-employed, increased slightly over the period of

Table 5.0 Summary of Changes in Aggregate Income by Selected Characteristics

Aggregate Income in billions of 1998 dollars

Characteristic	Aggregate Income				Percent Change 92-98
	1992	%	1998	%	
Total Aggregate	4,371.5	100.0	5,447.5	100.0	24.6
No Business	3,131.6	71.6	3,937.5	72.3	25.7
All Business	1,239.9	28.4	1,510.0	27.7	21.8
Self-employed	298.1	6.8	285.2	5.2	-4.3
Owner manager	710.5	16.3	895.5	16.4	26.0
Angel capitalist	76.7	1.8	151.3	2.8	97.3
Other angel	70.9	1.6	178.0	3.3	151.1
Stock owners	1,784.1	40.8	2,771.0	50.9	55.3
Non-business owners	1,050.1	24.0	1,672.5	30.7	59.3
Business owners	734.0	16.8	1,098.5	20.2	49.7
Non-stock owners	2,587.4	59.2	2,676.5	49.1	3.4
Non-business owners	2,081.5	47.6	2,265.0	41.6	8.8
Business owners	505.8	11.6	411.5	7.6	-18.6
Small Businesses Only					
All Small Businesses	1,005.6	23.0	1,180.7	21.7	17.4
Employees, 0 - 1	298.1	6.8	285.2	5.2	-4.3
Employees, 2 - 4	300.7	6.9	364.3	6.7	21.2
Employees 5 - 9	126.8	2.9	198.4	3.6	56.5
Employees 10 - 24	107.0	2.4	96.6	1.8	-9.7
Employees, 25+	173.0	4.0	236.1	4.3	36.5
Business age, less than 1 year	63.1	1.4	36.2	0.7	-42.6
Business age, 1 - 4	225.3	5.2	281.3	5.2	24.9
Business age, 5 - 9	248.4	5.7	233.7	4.3	-5.9
Business age 10 - 19	267.0	6.1	372.0	6.8	39.3
Business age 20+	201.8	4.6	257.4	4.7	27.6
Legal organization, Partner	209.4	4.8	217.8	4.0	4.0
Legal organization, sole proprietor	485.4	11.1	453.4	8.3	-6.6
Legal organization, corporation - sub s	139.6	3.2	258.6	4.7	85.2
Legal organization, corporation - sub c	171.2	3.9	250.8	4.6	46.5
Industry, agriculture	85.6	2.0	68.5	1.3	-20.0
Industry, construction, manufacturing	176.8	4.0	227.7	4.2	28.8
Industry, wholesale, retail	144.1	3.3	146.3	2.7	1.5
Industry, services, other	599.0	13.7	731.7	13.4	22.2
Industry, unclassified	n.a.	n.a.	n.a.	n.a.	n.a.
Founding status, bought, invested	267.7	6.1	264.5	4.9	-1.2
Founding status, started	682.9	15.6	836.9	15.4	22.6
Founding status, inherited, other	55.0	1.3	79.2	1.5	44.0

time. Families owning businesses and holding stocks saw their share of aggregate income increase (Appendix Table 5.11). Among families with no stock holdings, all families realized a decline in their share of aggregate income (Appendix Table 5.12).

Families owning small businesses realized an increase in aggregate income exceeding 17 percent from 1992 through 1998, however their share of total aggregate income declined from 23 percent in 1992 to under 22 percent in 1998. The families owning the smallest businesses (0 – 1 employees) realized a substantial decrease in their share of total family income from 23.0 percent in 1992 to 21.7 percent in 1998. While businesses with 2 to 9 employees and over 25 employees increased their share of total family income, businesses with 10 to 24 employees realized a slight decline. Among small business owning families with stock holdings, the share of family income remained relatively constant (Appendix Table 5.21). Among small business owning families with no stock holdings, those with the smallest (0 to 1 employees) and largest businesses (10 or more employees) realized substantial declines in the share of total family income (Appendix Table 5.22).

The largest share of total family income received by small business owners is held by those with older businesses, especially those with 10 or more years in business. Families with the youngest businesses hold a relatively insignificant share, ranging from 6.8 to 5.9 percent from 1992 to 1998. Small business owning families who also hold stock, realized similar changes in the share of family income held as all small businesses (Appendix Table 5.31). Among small business owning families without stock, the share of family income increased for those owning businesses from 1 to 4 years of age and over 20 years of age (Appendix Table 5.32).

Even though sole proprietors hold the largest share of total family income that share declined from 11.1 to 8.3 percent between 1992 and 1998. These shares increased for families owning corporations from 7.1 to 9.3 percent (Table 5.4). This general trend held true for both stockholding and non-stockholding small business owners (Appendix Tables 5.41 and 5.42).

Shares of total family income received by agriculturalists, wholesale and retail trade and service businesses have declined. The largest share of aggregate income generated by small business owning families is held by families owning service-related industries. Agriculture has realized a substantial decline in aggregate income, while construction, manufacturing and services have increased their aggregate income. Among families owning small businesses with stock holdings, all businesses realized a decline in aggregate income, except those engaged in the service industry (Appendix Table 5.51). Among families owning small businesses with no stock holdings, those engaged in agriculture and services realized a decline in their share of aggregate income (Appendix Table 5.52).

The largest share of total family income is received by those starting a business (15.6 percent in 1992 and 15.4 percent in 1998). Families buying or investing in a business have seen their share of total family income decline. This general trends holds for both stock and non-stock holding families (Appendix Tables 5.61 and 5.62).

In summary, families with no business ownership realized higher percentage increases in aggregate income than families with some business ownership. Families owning a small business and holding stock realized substantially higher increases in aggregate income than business owners without stock holdings. While aggregate

income increased for families owning small businesses, their share of aggregate income declined from 1992 to 1998. Families with mid-sized, older, corporate and inherited businesses engaged in either construction, manufacturing or services realized the largest increases in their share of aggregate income among families owning small businesses.

Shares of Wealth

Table 6.0 summarizes the changes in aggregate wealth for families with and without any business ownership between 1992 and 1998. The unit of observation is all families belonging to a specific group in each time period. Aggregate wealth may increase over time either because the group has become larger or group members have accumulated more wealth. In real terms, aggregate wealth increased by over 40 percent from 1992 through 1998 (Table 6.0). Aggregate wealth increased for a broad segment of the population, however families with no business ownership realized larger gains than families owning a business (49.4 percent versus 36.2 percent). The remarkable rise in the value of the stock market allowed stockholders to enjoy a 70 percent increase in aggregate wealth, while non-stockholders realized gains of just over 5 percent. As discussed above, a substantial shift occurred in the 1990s as a higher percentage of all families became stockholders.

Aggregate wealth is almost evenly divided between families owning and not owning a business. Non-business owning families controlled just under 54 percent and business owning families controlled just over 46 percent of total wealth in 1998 (Table 6.1). These shares of total wealth were relatively constant from 1992 to 1998. However, shares of wealth held by families with no business ownership increased from 51.5 to 53.8 percent while the share of wealth held by families with business ownership declined from 48.5 to 46.2 percent. Families with a business owned and managed by a family member hold the largest share of wealth held by business owning families (about 27 percent).

Families with stock holdings increased their share of total wealth holdings from 57.7 percent in 1992 to 68.8 percent in 1998 (Table 6.0). Among those with stock holdings, the share of total wealth held by business owning families increased from 31.7 to 36.6 percent with angel capitalists realizing the largest percentage increase. Among those without any stock holdings, the share of total wealth held by business owners fell substantially from 16.9 to 9.6 percent.

While small business owners realized a 37 percent increase in aggregate wealth, their share of total wealth declined from 35.3 percent in 1992 to 33.8 percent in 1998 (Table 6.0). The most substantial gains in the share of aggregate wealth were made by self-employed businesses, those with 10 – 19 years of experience, corporations, those engaged in the service industry and businesses started by the owner. Among those with stock holdings, the share of total wealth held by business owning families declined with angel capitalists realizing the most substantial declines (Appendix Table 6.11). Among those without any stock holdings, the share of total wealth held by business owners fell substantially with all businesses realizing substantial declines (Table 6.12).

Shares of total wealth held by each size of business remained relatively stable between 1992 and 1998 with the smallest businesses (0 to 1 employee) realizing gains

Table 6.0 Summary of Changes in Aggregate Net Worth by Selected Characteristics

Aggregate Net Worth in billions of 1998 dollars

Characteristic	Aggregate Net Worth				Percent Change 92-98
	1992	%	1998	%	
Total Aggregate	19,997	100.0	28,598	100.0	43.0
No Business	10,294	51.5	15,384	53.8	49.4
All Business	9,703	48.5	13,215	46.2	36.2
Self-employed	1,286	6.4	1,977	6.9	53.7
Owner manager	5,780	28.9	7,701	26.9	33.2
Angel capitalist	956	4.8	1,784	6.2	86.6
Other angel	1,681	8.4	1,753	6.1	4.3
Stock owners	11,548	57.7	19,676	68.8	70.4
Non-business owners	5,218	26.1	9,213	32.2	76.6
Business owners	6,330	31.7	10,462	36.6	65.3
Non-stock owners	8,449	42.3	8,923	31.2	5.6
Non-business owners	5,076	25.4	6,170	21.6	21.6
Business owners	3,373	16.9	2,753	9.6	-18.4
Small Businesses Only					
All Small Businesses	7,066	35.3	9,678	33.8	37.0
Employees, 0 - 1	1,286	6.4	1,977	6.9	53.7
Employees, 2 - 4	1,954	9.8	2,391	8.4	22.4
Employees 5 - 9	1,001	5.0	1,389	4.9	38.8
Employees 10 - 24	916	4.6	1,219	4.3	33.1
Employees, 25+	1,910	9.6	2,701	9.4	41.4
Business age, less than 1 year	204	1.0	151	0.5	-26.0
Business age, 1 - 4	952	4.8	1,454	5.1	52.7
Business age, 5 - 9	1,430	7.2	1,804	6.3	26.2
Business age 10 - 19	2,002	10.0	3,234	11.3	61.5
Business age 20+	2,478	12.4	3,034	10.6	22.4
Legal organization, Partner	1,521	7.6	2,108	7.4	38.6
Legal organization, sole proprietor	2,684	13.4	2,928	10.2	9.1
Legal organization, corporation - sub s	1,314	6.6	2,329	8.1	77.2
Legal organization, corporation - sub c	1,547	7.7	2,313	8.1	49.5
Industry, agriculture	779	3.9	901	3.2	15.7
Industry, construction, manufacturing	1,358	6.8	1,591	5.6	17.2
Industry, wholesale, retail	1,095	5.5	1,228	4.3	12.1
Industry, services, other	3,833	19.2	5,718	20.0	49.2
Industry, unclassified	n.a.	n.a.	n.a.	n.a.	n.a.
Founding status, bought, invested	2,111	10.6	2,448	8.6	16.0
Founding status, started	4,294	21.5	6,467	22.6	50.6
Founding status, inherited, other	661	3.3	763	2.7	15.4

and the next smallest businesses (1 to 4 employees) realizing losses or being quite stable. A similar trend was found for small business owning families with stock holdings (Appendix Table 6.21). The trend was reversed for small business owning families without stock holdings (Appendix Table 6.22).

Families owning older businesses (greater than 10 years of age) control about 22 percent of all wealth (and about 65 percent of wealth held by small business owning families). The share of total wealth held by these older business owners was relatively constant from 1992 to 1998. Similar wealth shares patterns emerge for businesses with and without stock ownership (Appendix Tables 6.31 and 6.32).

Families owning small businesses organized as sole proprietorships experienced declines in the share of total wealth held (13.4 percent in 1992 to 10.2 percent in 1998), while those organized as corporations experienced substantial increases (14.3 percent in 1992 to 16.2 percent in 1998) in the share of total wealth held. A similar pattern of changes in wealth holdings emerges for those with and without stock holdings (Appendix Tables 6.41 and 6.42).

Families owning service-related small businesses have increased their share of total wealth (19.2 percent in 1992 to 20.0 percent in 1998). Shares of wealth for all other small business owning families have declined. This general trend holds for both small business owning families with and without any stock holdings (Appendix Tables 6.51 and 6.52).

Families who started a small business control a majority of the total wealth held by small business owning families and the share of total wealth they control has increased from slightly from 21.5 percent to 22.6 percent from 1992 to 1998. The share of total wealth held by families purchasing or investing and inheriting small businesses declined from 1992 to 1998. Similar patterns emerge for both stock holding and non-stock holding families who own small businesses (Appendix Tables 6.61 and 6.62).

In summary, families with no business ownership realized larger percentage gains in wealth than families owning a business. While aggregate wealth increased for families with small businesses, the share of aggregate wealth actually declined for these families. The most substantial gains in the share of aggregate wealth were made by self-employed businesses, those with 10 – 19 years of experience, corporations, those engaged in the service industry and businesses started by the owner.

Determinants of High Income and High Wealth

The determinants of high income and high wealth are assessed for families from 1989 through 1998 in Tables 7.1 through 8.2. Most importantly, this analysis assesses whether families owning a small business are more likely to be classified as high income or high wealth than families not owning a business. A family is classified as high income if their annual income exceeds \$50,000. A family is classified as high wealth if its wealth exceeds \$1 million. Logistic regressions are employed to assess the impact of personal and demographic characteristics, characteristics of the business, sources of income and sources of wealth on the income and wealth held by the family.

Table 7.1 Determinants of High Income for All Respondents (focusing on families owning small businesses)

Logistic Regression

Characteristic of Household Head ¹	1989			1992			1995			1998		
	Parameter	Standard	p-value	Parameter	Standard	p-value	Parameter	Standard	p-value	Parameter	Standard	p-value
	Estimate ²	Error		Estimate	Error		Estimate	Error		Estimate	Error	
Intercept	-4.7533	0.2248	0.0001	-5.0056	0.2527	0.0001	-5.3591	0.2447	0.0001	-5.3647	0.2381	0.0001
Age, 35 - 44	0.9539	0.1301	0.0001	0.8789	0.1222	0.0001	0.8839	0.1147	0.0001	1.0601	0.1153	0.0001
Age, 45 - 54	1.3189	0.1436	0.0001	1.4558	0.1328	0.0001	0.9204	0.1220	0.0001	1.3892	0.1226	0.0001
Age, 55 - 64	0.7204	0.1550	0.0001	0.8060	0.1463	0.0001	0.9728	0.1394	0.0001	0.8412	0.1386	0.0001
Age, 65 - 74	0.0439	0.1789	0.8059	0.1626	0.1725	0.3459	0.0051	0.1611	0.9749	0.2218	0.1530	0.1472
Age, 75 and over	-0.2570	0.2490	0.3019	-0.0202	0.2129	0.9245	-0.3480	0.1982	0.0791	-0.1767	0.1938	0.3618
Race, non-minority (white)	0.5693	0.1252	0.0001	0.5238	0.1183	0.0001	0.5943	0.1115	0.0001	0.7328	0.1086	0.0001
Gender, male	0.3181	0.1945	0.1020	0.5704	0.1775	0.0013	0.9353	0.1696	0.0001	0.6483	0.1479	0.0001
Education, high school diploma	0.9924	0.1551	0.0001	1.1352	0.1803	0.0001	1.0441	0.1576	0.0001	1.3306	0.1690	0.0001
Education, some college	1.5488	0.1736	0.0001	1.8149	0.1885	0.0001	1.5684	0.1684	0.0001	1.8805	0.1777	0.0001
Education, college degree or more	2.4605	0.1574	0.0001	2.6607	0.1760	0.0001	2.4338	0.1569	0.0001	2.7610	0.1684	0.0001
Marital status, married	1.8207	0.1589	0.0001	1.6094	0.1379	0.0001	1.6430	0.1306	0.0001	1.6767	0.1205	0.0001
Region, Northcentral				-0.2911	0.1263	0.0212	-0.0931	0.1216	0.4440	-0.2607	0.1206	0.0306
Region, South				-0.5859	0.1211	0.0001	-0.0710	0.1135	0.5318	-0.1016	0.1119	0.3639
Region, West				-0.2946	0.1329	0.0266	-0.0188	0.1246	0.8804	-0.0932	0.1240	0.4526
Small business owner/manager	0.4870	0.1392	0.0005	0.4961	0.1177	0.0001	0.4201	0.1149	0.0003	0.2386	0.1156	0.0390
-2 Log Likelihood			2,780			3,292			3,765			3,903
Observations			3,143			3,906			4,299			4,305

¹ The left-out dummy variables are age (less than 35), race (minority), gender (female), education (less than high school), marital status (not married), region (Northeast) and non-business owning families.

² The sign (+/-) on the parameter estimate is employed to determine the influence of each characteristic on being classified as high income; standard error is the statistical error surrounding the estimate; and p-value determines if a characteristic causes a statistically significant change in high income status. Significant differences at the 0.05 level or below level are indicated in bold type.

Table 7.2 Determinants of High Wealth for All Respondents (focusing on families owning small businesses)

Logistic Regression

Characteristic of Household Head ¹	1989			1992			1995			1998		
	Parameter	Standard	p-value	Parameter	Standard	p-value	Parameter	Standard	p-value	Parameter	Standard	p-value
	Estimate ²	Error		Estimate	Error		Estimate	Error		Estimate	Error	
Intercept	-9.3890	0.7626	0.0001	-8.5787	0.7541	0.0001	-10.0011	0.8629	0.0001	-8.9349	0.7806	0.0001
Age, 35 - 44	0.1708	0.4931	0.7290	1.2118	0.5418	0.0253	1.1398	0.5887	0.0529	0.9294	0.4011	0.0205
Age, 45 - 54	2.0934	0.4457	0.0001	2.2486	0.5217	0.0001	2.3939	0.5528	0.0001	1.4725	0.3842	0.0001
Age, 55 - 64	2.4871	0.4516	0.0001	2.8732	0.5209	0.0001	3.3198	0.5597	0.0001	2.4873	0.3831	0.0001
Age, 65 - 74	3.0031	0.4621	0.0001	3.2472	0.5363	0.0001	3.5055	0.5673	0.0001	2.4921	0.3960	0.0001
Age, 75 and over	3.2155	0.5085	0.0001	3.1438	0.5699	0.0001	3.1557	0.5964	0.0001	2.3629	0.4467	0.0001
Race, non-minority (white)	1.1676	0.4456	0.0088	0.1033	0.2902	0.7218	0.6336	0.3576	0.0764	0.6647	0.2956	0.0245
Gender, male	1.0925	0.4816	0.0233	0.5719	0.4374	0.1911	1.1426	0.4169	0.0061	0.9640	0.3362	0.0041
Education, high school diploma	0.4041	0.4343	0.3522	0.4893	0.5074	0.3349	0.7675	0.5611	0.1714	1.1068	0.6400	0.0837
Education, some college	1.3926	0.4360	0.0014	1.4542	0.4898	0.0030	2.0902	0.5384	0.0001	2.3061	0.6234	0.0002
Education, college degree or more	2.5040	0.3701	0.0001	2.5417	0.4386	0.0001	2.9016	0.5038	0.0001	3.1596	0.6007	0.0001
Marital status, married	0.6381	0.3527	0.0704	0.7104	0.3359	0.0344	0.3247	0.2986	0.2770	0.2671	0.2543	0.2937
Region, Northcentral				-0.2601	0.2920	0.3731	-0.1316	0.2909	0.6510	-0.2258	0.2565	0.3786
Region, South				-0.2583	0.2741	0.3459	-0.1120	0.2637	0.6711	-0.1455	0.2320	0.5304
Region, West				0.2520	0.2669	0.3451	0.0631	0.2778	0.8204	0.4006	0.2346	0.0877
Small business owner/manager	2.0625	0.2336	0.0001	1.5568	0.2013	0.0001	1.9230	0.2031	0.0001	1.2922	0.1762	0.0001
-2 Log Likelihood			719			867			858			1,167
Observations			3,143			3,906			4,299			4,305

¹ The left-out dummy variables are age (less than 35), race (minority), gender (female), education (less than high school), marital status (not married), region (Northeast) and non-business owning families.

² The sign (+/-) on the parameter estimate is employed to determine the influence of each characteristic on being classified as high wealth; standard error is the statistical error surrounding the estimate; and p-value determines if a characteristic causes a statistically significant change in high wealth status. Significant differences at the 0.05 level or below level are indicated in bold type.

Tables 7.1 and 7.2 examine the determinants of high income and high wealth for families owning and not owning a small business. Families owning a small business are consistently more likely to be classified as high income than families not owning a small business, *ceteris paribus* (Table 7.1). In addition, families with older, non-minority and well educated household heads were more likely to be high income families than other families. Table 7.2 examines the determinants of high wealth families owning and not owning a small business. These results are very similar to the high income regression analysis. Families owning a small business are consistently more likely to be classified as high wealth than families not owning a small business. Families with older, non-minority and well educated household heads were more likely to be high wealth families than other families. These results are consistent across years for both high income and high wealth.

Tables 8.1 and 8.2 examine the determinants of high income and high wealth when both personal and demographic characteristics of the household head and characteristics of the business are included in the regression analysis. Small business owning families classified as high income were consistently more likely to be somewhat older, better educated, and married individuals, who own a larger company (Tables 8.1a and 8.1b). Families classified as high wealth are consistently more likely to own larger businesses, hold stocks and are less likely to have any credit card debt than other small business owning families (Tables 8.2a and 8.2b).

The logistic regression analysis confirms previous results derived from assessing mean income and wealth. Most importantly, families owning small businesses are more likely to be classified as high income and high wealth families than other families. The next section discusses the conclusions and implications derived from these results.

Conclusions

This study is primarily concerned with changes in income and wealth of families owning and not owning small businesses from the recession of the early 1990s through 1998. In addressing these changes in income and wealth, this study examined five hypotheses. This section discusses each of the hypotheses and the implications of the results of this study.

Hypothesis 1

Hypothesis number one suggests that families owning small businesses have increased real mean income from 1992 through 1998 more than families not owning small businesses. When simply comparing real mean income of small business owning families and other families, small business owning families had significantly higher real mean income than non-business owning families across all years of the study. In addition, these small business owning families realized a larger percentage increase in real mean income (21.5 percent) than families not owning a business (15.6 percent) from 1992 through 1998. A more rigorous multivariate analysis of the probability of being classified as high income (at least \$50,000 annual income) reveals that families owning small businesses have a significantly higher probability of being classified as high income than families not owning a business.

Table 8.1a Determinants of High Income for Families Owning a Small Business, 1989 – 1992

Logistic Regression

Characteristic of Household Head ¹	1989			1992		
	Parameter Estimate ²	Standard Error	p-value	Parameter Estimate	Standard Error	p-value
Intercept	-7.4437	1.3418	0.0001	-3.6765	1.1424	0.0013
Age, 35 - 44	1.8719	0.5046	0.0002	1.1536	0.3580	0.0013
Age, 45 - 54	2.4830	0.6063	0.0001	1.5337	0.4119	0.0002
Age, 55 - 64	1.0295	0.6664	0.1224	0.7757	0.4634	0.0942
Age, 65 - 74	0.0499	1.0066	0.9605	-0.3522	0.6925	0.6111
Age, 75 and over	0.1240	1.8532	0.9467	0.5716	0.9609	0.5519
Race, non-minority (white)	-0.1146	0.5447	0.8334	0.5618	0.3815	0.1409
Gender, male	2.0793	0.8522	0.0147	1.0670	0.5875	0.0694
Education, high school diploma	1.7875	0.5893	0.0024	-0.1153	0.5152	0.8229
Education, some college	1.0249	0.6449	0.1120	0.4874	0.5503	0.3758
Education, college degree or more	2.3434	0.6296	0.0002	1.3008	0.5224	0.0128
Marital status, married	0.9602	0.5570	0.0847	1.4260	0.3570	0.0001
Region, Northcentral				-0.0760	0.3630	0.8341
Region, South				-0.6086	0.3528	0.0845
Region, West				-0.0562	0.3611	0.8763
Employees, 2 - 4	-0.5645	0.4257	0.1848	0.2880	0.3058	0.3464
Employees, 5 - 9	-0.5214	0.5653	0.3564	0.0322	0.4478	0.9426
Employees, 10 - 25	2.0103	1.0713	0.0606	0.9091	0.6207	0.1430
Employees, 25 or more	2.7356	1.6036	0.0880	1.3854	0.7068	0.0500
Business age, 1 - 4	-0.0256	0.7537	0.9729	-0.9277	0.4789	0.0527
Business age, 5 - 9	1.0425	0.7825	0.1828	-1.2111	0.5139	0.0184
Business age, 10 - 19	0.4670	0.8470	0.5814	-0.6793	0.5328	0.2023
Business age, 20 or more	0.9972	0.9428	0.2902	-0.8420	0.5831	0.1487
Organization, sole proprietor	-0.3672	0.4303	0.3935	-0.3090	0.4051	0.4456
Organization, Corporation - sub S	0.4693	0.7957	0.5553	-0.1192	0.5311	0.8224
Organization, Corporation - regular	-0.1073	0.7511	0.8864	0.0757	0.5171	0.8836
Industry, construction, manufacturing, transportation	0.1211	0.5604	0.8290	0.2663	0.4734	0.5737
Industry, wholesale and retail	-0.2123	0.5637	0.7065	-0.3989	0.4453	0.3704
Industry, service	0.5756	0.5163	0.2649	0.2621	0.4217	0.5343
Industry, unclassified	13.3720	7622.5000	0.9986	0.0000	.	.
Founder, started	0.5988	0.4387	0.1722	0.1728	0.3117	0.5793
Founder, inherited	0.1727	0.6576	0.7928	-0.0150	0.6229	0.9808
Wages and salaries	1.1115	0.5046	0.0276	0.1885	0.3822	0.6219
Professional practice	-0.5825	0.4107	0.1561	0.0678	0.2757	0.8057
Non-taxable investments	19.3125	925.7000	0.9834	0.5811	0.5576	0.2974
Other interest income	0.8570	0.3748	0.0222	0.1408	0.2633	0.5928
Dividends	-0.3693	0.4616	0.4236	0.5919	0.3450	0.0863
Sale of stocks/bonds/real estate	2.8723	0.8425	0.0007	0.4921	0.4208	0.2422
Net rent/trust/royalties	1.5271	0.5258	0.0037	0.5274	0.3164	0.0955

Table 8.1a Determinants of High Income for Families Owning a Small Business, 1989 – 1992 (continued)

Logistic Regression

Characteristic of Household Head ¹	1989			1992		
	Parameter Estimate ²	Standard Error	p-value	Parameter Estimate	Standard Error	p-value
Unemployment or worker's compensation	-0.2628	0.8509	0.7575	-0.2105	0.5113	0.6805
Child support or alimony	1.2560	1.1431	0.2719	1.1388	0.9279	0.2197
Welfare, food stamps	-15.3086	3608.0000	0.9966	-1.3539	1.1127	0.2237
Social security, pensions	0.4342	0.6457	0.5013	-0.2871	0.4217	0.4960
Other sources	-1.4915	1.3200	0.2585	-0.8944	0.5085	0.0786
-2 Log Likelihood				264		
Observations				570		
				943		

¹ The left-out dummy variables are age (less than 35), race (minority), gender (female), education (less than high school), marital status (not married), region (Northeast), employees (0 to 1), business age (less than 1 year), organization (partner), industry (agriculture) and founder (bought/invested).

² The sign (+/-) on the parameter estimate is employed to determine the influence of each characteristic on being classified as high income; standard error is the statistical error surrounding the estimate; and p-value determines if a characteristic causes a statistically significant change in high income status. Significant differences at the 0.05 level or below level are indicated in bold type.

Table 8.1b Determinants of High Income for Families Owning a Small Business, 1995 - 1998

Logistic Regression

Characteristic of Household Head ¹	1995			1998		
	Parameter Estimate ²	Standard Error	p-value	Parameter Estimate	Standard Error	p-value
Intercept	-4.8772	1.1775	0.0001	-5.5397	1.1750	0.0001
Age, 35 - 44	0.6257	0.3612	0.0832	1.1244	0.3801	0.0031
Age, 45 - 54	0.4867	0.3936	0.2163	0.7716	0.4026	0.0553
Age, 55 - 64	0.9430	0.5007	0.0597	-0.3438	0.4785	0.4724
Age, 65 - 74	1.0136	0.6568	0.1228	0.2856	0.7362	0.6981
Age, 75 and over	-0.9855	1.0539	0.3497	-1.6485	1.1460	0.1503
Race, non-minority (white)	-0.4793	0.3936	0.2233	-0.4834	0.3808	0.2043
Gender, male	0.3043	0.5759	0.5973	0.4959	0.5393	0.3579
Education, high school diploma	1.4856	0.5605	0.0080	0.3504	0.4761	0.4617
Education, some college	1.9228	0.5966	0.0013	0.6709	0.4920	0.1727
Education, college degree or more	2.2749	0.5674	0.0001	1.2575	0.4887	0.0101
Marital status, married	1.9719	0.3836	0.0001	1.2800	0.3802	0.0008
Region, Northcentral	0.5160	0.3728	0.1663	-0.1290	0.3694	0.7270
Region, South	0.2870	0.3340	0.3901	0.3706	0.3336	0.2667
Region, West	0.1664	0.3728	0.6554	0.5221	0.3885	0.1789
Employees, 2 - 4	0.1548	0.2920	0.5961	0.8524	0.2873	0.0030
Employees, 5 - 9	0.3985	0.4522	0.3781	0.8642	0.3907	0.0270
Employees, 10 - 25	0.9741	0.5240	0.0630	1.9196	0.6600	0.0036
Employees, 25 or more	3.6377	1.6768	0.0300	2.4652	0.9366	0.0085
Business age, 1 - 4	-0.3044	0.5007	0.5432	0.8409	0.6431	0.1910
Business age, 5 - 9	-0.3875	0.5253	0.4607	1.2496	0.6848	0.0680
Business age, 10 - 19	-0.3960	0.5547	0.4753	1.3332	0.6816	0.0505
Business age, 20 or more	0.0802	0.6287	0.8985	2.0269	0.7446	0.0065
Organization, sole proprietor	0.1081	0.3375	0.7488	-0.0263	0.3480	0.9397
Organization, Corporation - sub S	-0.1407	0.4638	0.7615	0.0368	0.4594	0.9362
Organization, Corporation - regular	0.5281	0.5627	0.3480	0.1589	0.4877	0.7446
Industry, construction, manufacturing, transportation	0.5230	0.4358	0.2301	0.2382	0.4695	0.6118
Industry, wholesale and retail	-0.1842	0.4374	0.6737	0.1576	0.4856	0.7456
Industry, service	0.4041	0.4020	0.3148	1.2377	0.4527	0.0063
Industry, unclassified	0.0000	.	.	9.0477	737.0000	0.9902
Founder, started	-0.2162	0.3350	0.5187	-0.0925	0.3094	0.7650
Founder, inherited	-0.1461	0.5876	0.8036	-1.2700	0.6004	0.0344
Wages and salaries	0.4502	0.3619	0.2135	0.4790	0.3650	0.1894
Professional practice	0.0867	0.2640	0.7425	0.1025	0.2580	0.6911
Non-taxable investments	1.8309	0.6227	0.0033	0.0183	0.6163	0.9763
Other interest income	0.6220	0.2867	0.0300	0.3925	0.2750	0.1536
Dividends	0.0716	0.3306	0.8286	0.3309	0.3566	0.3534
Sale of stocks/bonds/real estate	0.9858	0.3721	0.0081	0.7291	0.3757	0.0523
Net rent/trust/royalties	-0.3834	0.3334	0.2502	0.1701	0.3579	0.6345
Unemployment or worker's compensation	0.5313	0.7507	0.4791	0.1360	1.0646	0.8983

Table 8.1b Determinants of High Income for Families Owning a Small Business, 1995 – 1998 (continued)

Logistic Regression

Characteristic of Household Head ¹	1995			1998		
	Parameter	Standard		Parameter	Standard	
	Estimate ²	Error	p-value	Estimate	Error	p-value
Child support or alimony	-0.2480	0.6675	0.7102	1.1008	0.8807	0.2113
Welfare, food stamps	-14.5240	835.6000	0.9861	-1.2923	1.6783	0.4413
Social security, pensions	-0.7154	0.4325	0.0981	0.1363	0.4990	0.7847
Other sources	-0.7423	0.5450	0.1732	0.0723	0.8066	0.9286
-2 Log Likelihood			464			491
Observations			968			1,012

¹ The left-out dummy variables are age (less than 35), race (minority), gender (female), education (less than high school), marital status (not married), region (Northeast), employees (0 to 1), business age (less than 1 year), organization (partner), industry (agriculture) and founder (bought/invested).

² The sign (+/-) on the parameter estimate is employed to determine the influence of each characteristic on being classified as high income; standard error is the statistical error surrounding the estimate; and p-value determines if a characteristic causes a statistically significant change in high income status. Significant differences at the 0.05 level or below level are indicated in bold type.

Table 8.2a Determinants of High Wealth for Families Owning a Small Business, 1989 - 1992

Logistic Regression

Characteristic of Household Head ¹	1989			1992		
	Parameter	Standard		Parameter	Standard	
	Estimate ²	Error	p-value	Estimate	Error	p-value
Intercept	-23.6622	1600.2	0.9882	-7.6335	3.677	0.0379
Age, 35 - 44	-0.367	1.204	0.7605	-0.3982	0.9967	0.6895
Age, 45 - 54	2.8569	1.2928	0.0271	0.443	0.9595	0.6443
Age, 55 - 64	2.102	1.4921	0.1589	0.9757	1.0153	0.3366
Age, 65 - 74	2.3819	1.7161	0.1651	1.9765	1.1276	0.0796
Age, 75 and over	5.5882	2.0069	0.0054	0.8974	1.4734	0.5425
Race, non-minority (white)	1.9549	1.4709	0.1838	-0.9072	0.7031	0.1970
Gender, male	0.8399	1.8245	0.6453	0.8613	1.1898	0.4691
Education, high school diploma	0.6382	1.3114	0.6265	-0.3753	0.9744	0.7001
Education, some college	-0.1596	1.3976	0.9091	0.3995	0.9585	0.6768
Education, college degree or more	2.3544	1.4172	0.0966	0.7791	0.8524	0.3607
Marital status, married	0.5869	1.1819	0.6195	-0.5493	0.7396	0.4577
Region, Northcentral				-0.8244	0.6975	0.2372
Region, South				-0.4245	0.6743	0.5291
Region, West				-0.093	0.6885	0.8926
Employees, 2 - 4	-1.557	0.9128	0.0881	0.8778	0.6477	0.1753
Employees, 5 - 9	0.5852	1.0288	0.5695	1.6674	0.8019	0.0376
Employees, 10 - 25	2.5366	1.2002	0.0346	3.3679	0.9285	0.0003
Employees, 25 or more	2.4317	1.4914	0.1030	4.3204	0.9697	0.0001
Business age, 1 - 4	3.1323	3.1276	0.3166	1.3743	1.6631	0.4086
Business age, 5 - 9	1.3556	3.1475	0.6667	1.2182	1.6019	0.4470
Business age, 10 - 19	2.2808	3.1478	0.4687	2.4906	1.596	0.1186
Business age, 20 or more	3.8274	3.1671	0.2269	2.4822	1.6073	0.1225
Organization, sole proprietor	0.643	0.8787	0.4644	0.2437	0.6714	0.7167
Organization, Corporation - sub S	1.7257	1.1479	0.1327	1.1633	0.8049	0.1484
Organization, Corporation - regular	0.2804	1.1066	0.7999	-0.6701	0.7507	0.3720
Industry, construction, manufacturing, transportation	-2.3726	1.3563	0.0802	-1.0342	0.9925	0.2974
Industry, wholesale and retail	-0.7459	1.2215	0.5414	-1.536	0.9396	0.1021
Industry, service	-1.4289	1.0505	0.1738	-0.7274	0.8143	0.3717
Industry, unclassified	-17.5322	6136.5	0.9977	0.	.	.
Founder, started	-1.0304	0.8819	0.2427	-0.3482	0.5225	0.5051
Founder, inherited	-0.2546	0.9049	0.7785	0.5308	0.8783	0.5456
Transaction accounts	12.7198	1600.2	0.9937	-1.006	2.2117	0.6492

Table 8.2a Determinants of High Wealth for Families Owning a Small Business, 1989 – 1992 (continued)

Logistic Regression

Characteristic of Household Head ¹	1989			1992		
	Parameter Estimate ²	Standard Error	p-value	Parameter Estimate	Standard Error	p-value
Certificates of deposit	0.729	0.7157	0.3084	0.1709	0.4725	0.7176
Total directly-held mutual funds	1.199	0.9046	0.1850	0.4649	0.5749	0.4188
Stocks	0.8239	0.6841	0.2285	1.1395	0.5046	0.0239
Total bonds	1.8998	0.9317	0.0415	0.7498	0.5795	0.1957
Total of IRAs and thrifts	-0.0754	0.777	0.9227	0.3461	0.5328	0.5160
Savings bonds	0.09	0.7273	0.9015	-0.5603	0.5238	0.2848
Cash value of whole life insurance	0.9801	0.725	0.1764	0.425	0.4634	0.3590
Other managed assets	2.6566	1.2796	0.0379	0.2871	1.0605	0.7866
Other financial assets	0.6925	0.6919	0.3169	0.6434	0.4828	0.1827
Vehicles	-1.0508	1.424	0.4606	0.5976	1.0823	0.5808
Primary residence	-1.1732	1.141	0.3038	0.9839	1.0543	0.3507
Other residential real estate	0.8571	0.8553	0.3163	0.8825	0.5892	0.1342
Net equity in nonres. real estate	1.4504	0.7101	0.0411	1.3774	0.4667	0.0032
Business interests	0.8453	1.1527	0.4634	0.8823	0.7327	0.2285
Other nonfinancial	-1.0935	0.8066	0.1752	0.2903	0.5632	0.6062
Housing debt	-1.1909	0.9669	0.2181	-0.1615	0.6431	0.8018
Other lines of credit	-0.0613	1.4291	0.9658	0.1908	0.8941	0.8310
Debt for other residential property	1.8556	1.1516	0.1071	0.5727	0.6516	0.3795
Credit card debt	-0.9009	0.8004	0.2603	-0.1292	0.4729	0.7847
Installment loans	0.8069	0.7157	0.2595	-0.9033	0.5026	0.0723
Other debts	0.6614	0.97	0.4954	0.2186	0.7219	0.7620
-2 Log likelihood			103			180
Observations			570			943

¹ The left-out dummy variables are age (less than 35), race (minority), gender (female), education (less than high school), marital status (not married), region (Northeast), employees (0 to 1), business age (less than 1 year), organization (partner), industry (agriculture) and founder (bought/invested).

² The sign (+/-) on the parameter estimate is employed to determine the influence of each characteristic on being classified as high wealth; standard error is the statistical error surrounding the estimate; and p-value determines if a characteristic causes a statistically significant change in high wealth status. Significant differences at the 0.05 level or below level are indicated in bold type.

Table 8.2b Determinants of High Wealth for Families Owning a Small Business, 1995 - 1998

Logistic Regression

Characteristic of Household Head ¹	1995			1998		
	Parameter Estimate ²	Standard Error	p-value	Parameter Estimate	Standard Error	p-value
Intercept	-5.6652	2.6261	0.0310	-5.4792	3.4350	0.1107
Age, 35 - 44	-0.1854	0.8627	0.8299	0.0473	0.9930	0.9620
Age, 45 - 54	0.7072	0.839	0.3993	0.8463	1.0237	0.4084
Age, 55 - 64	1.5396	0.9558	0.1072	0.8937	1.0285	0.3849
Age, 65 - 74	1.4357	1.0574	0.1745	-0.6856	1.2350	0.5788
Age, 75 and over	1.4483	1.3446	0.2814	-1.3959	1.5713	0.3744
Race, non-minority (white)	0.6532	0.8457	0.4399	0.2197	0.8690	0.8004
Gender, male	-0.5494	1.0986	0.6170	1.2889	1.0202	0.2064
Education, high school diploma	0.5749	1.0192	0.5727	-0.5214	1.2647	0.6801
Education, some college	1.5301	1.0478	0.1442	0.1158	1.2931	0.9287
Education, college degree or more	1.7249	1.0098	0.0876	0.4787	1.2574	0.7034
Marital status, married	0.5171	0.7251	0.4758	-0.3300	0.6947	0.6347
Region, Northcentral	-0.5585	0.6354	0.3794	-0.9501	0.7043	0.1773
Region, South	-0.5204	0.5821	0.3713	0.0897	0.5698	0.8749
Region, West	-0.2933	0.6477	0.6507	0.3149	0.6092	0.6052
Employees, 2 - 4	0.445	0.5793	0.4423	0.3634	0.5701	0.5239
Employees, 5 - 9	1.574	0.7131	0.0273	0.5338	0.6892	0.4386
Employees, 10 - 25	2.1392	0.7466	0.0042	4.2984	0.9073	0.0001
Employees, 25 or more	3.3911	0.9461	0.0003	3.0132	0.8618	0.0005
Business age, 1 - 4	-1.3085	1.132	0.2477	-0.9357	1.3927	0.5017
Business age, 5 - 9	-1.1118	1.136	0.3277	0.4336	1.3971	0.7563
Business age, 10 - 19	-1.0623	1.096	0.3324	0.1139	1.3440	0.9325
Business age, 20 or more	-0.908	1.1878	0.4446	1.4448	1.4190	0.3086
Organization, sole proprietor	0.7495	0.6131	0.2216	-0.5321	0.6254	0.3949
Organization, Corporation - sub S	1.3147	0.6784	0.0526	-0.4377	0.6929	0.5276
Organization, Corporation - regular	0.7437	0.7415	0.3158	-0.0246	0.6864	0.9715
Industry, construction, manufacturing, transportation	-0.5303	0.8016	0.5083	-1.7703	0.9795	0.0707
Industry, wholesale and retail	-1.4889	0.7574	0.0493	-1.7351	1.0377	0.0945
Industry, service	-0.4044	0.6786	0.5512	-0.5875	0.8602	0.4947
Industry, unclassified	0.	.	.	8.6238	1027.4000	0.9933
Founder, started	-0.4576	0.4986	0.3588	0.7127	0.5783	0.2178
Founder, inherited	-0.2377	0.8243	0.7731	0.3470	0.9157	0.7048
Transaction accounts	-2	1.6289	0.2195	0.2127	2.5866	0.9345

Table 8.2b Determinants of High Wealth for Families Owning a Small Business, 1995 – 1998
(continued)

Logistic Regression

Characteristic of Household Head ¹	1995			1998		
	Parameter Estimate ²	Standard Error	p-value	Parameter Estimate	Standard Error	p-value
Certificates of deposit	-0.5125	0.4511	0.2559	0.9595	0.5040	0.0569
Total directly-held mutual funds	0.2611	0.4728	0.5807	0.5936	0.4487	0.1859
Stocks	0.8435	0.4479	0.0596	1.4027	0.4979	0.0048
Total bonds	0.6429	0.5633	0.2537	0.7416	0.6359	0.2435
Total of IRAs and thrifts	0.2554	0.4954	0.6062	0.0893	0.4744	0.8506
Savings bonds	-0.7803	0.4916	0.1124	0.0026	0.4831	0.9957
Cash value of whole life insurance	0.3056	0.4234	0.4705	0.5983	0.4284	0.1625
Other managed assets	0.8455	0.9111	0.3534	1.2375	0.6070	0.0415
Other financial assets	0.2041	0.4832	0.6727	0.5914	0.4473	0.1861
Vehicles	0.4065	0.8207	0.6204	-2.3052	0.7253	0.0015
Primary residence	1.1318	1.0902	0.2992	1.3642	1.0975	0.2139
Other residential real estate	0.6166	0.5217	0.2373	0.8079	0.4970	0.1040
Net equity in nonres. real estate	0.8835	0.4555	0.0524	0.6932	0.4737	0.1434
Business interests	1.7167	0.9026	0.0572	0.2857	0.7925	0.7185
Other nonfinancial	0.805	0.4999	0.1073	0.6910	0.5158	0.1804
Housing debt	0.8585	0.5881	0.1443	-0.4501	0.5267	0.3928
Other lines of credit	0.815	0.8921	0.3610	1.0788	0.9316	0.2468
Debt for other residential property	0.0331	0.6442	0.9590	-0.1360	0.6042	0.8219
Credit card debt	-1.101	0.4947	0.0260	-1.2357	0.4892	0.0115
Installment loans	-0.9518	0.4774	0.0462	0.0433	0.4565	0.9245
Other debts	-0.00945	0.7145	0.9894	-0.6525	0.8539	0.4448
-2 Log likelihood			194			196
Observations			968			1,012

¹ The left-out dummy variables are age (less than 35), race (minority), gender (female), education (less than high school), marital status (not married), region (Northeast), employees (0 to 1), business age (less than 1 year), organization (partner), industry (agriculture) and founder (bought/invested).

² The sign (+/-) on the parameter estimate is employed to determine the influence of each characteristic on being classified as high wealth; standard error is the statistical error surrounding the estimate; and p-value determines if a characteristic causes a statistically significant change in high wealth status. Significant differences at the 0.05 level or below level are indicated in bold type.

Hypothesis 2

The second hypothesis suggests that families owning small businesses have increased real mean wealth from 1992 through 1998 more than families not owning small businesses. Small business owning families had a significantly higher real mean wealth than non-business owning families across all years of the study. Similar to changes in real mean income, these small business owning families realized a larger percentage increase in real mean wealth (41.7 percent) than families not owning a business (37.3 percent) from 1992 through 1998. A multivariate analysis of the probability of being classified as high wealth (at least \$1 million wealth) reveals that families owning small businesses have a significantly higher probability of being classified as high wealth than families not owning a business.

Hypothesis 3

The first two hypotheses suggest that families owning small businesses had higher real mean income and wealth than families not owning a business and these families owning small businesses appeared to realize larger percentage increases in real mean income and wealth from 1992 to 1998. The third hypothesis moves from considering changes in real mean income to changes in the shares of real aggregate income. The third hypothesis suggests that families owning small businesses have increased their share of aggregate income from 1992 through 1998 more than families not owning small businesses. Families owning small businesses contribute about 22 percent to aggregate income, while families not owning any business contribute about 72 percent to aggregate income. Small businesses realized a slight decline in the share of aggregate income from 23.0 to 21.7 percent from 1992 to 1998. During the same period of time, families not owning any business increased their share of aggregate income from 71.6 percent to 72.3 percent. The small businesses realizing the most substantial gains in the share of aggregate income were larger, older, organized as corporations, engaged in construction, manufacturing or service industries and inherited by the current owners.

Hypothesis 4

The fourth hypothesis states that families owning small businesses have increased their share of aggregate wealth from 1992 through 1998 more than families not owning small businesses. Families owning any businesses nearly evenly split aggregate wealth with families with no business ownership (46.2 percent for families with no business ownership and 53.8 percent for families owning businesses in 1998). While families owning small businesses generate about 22 percent of aggregate income, they control about 34 percent of aggregate wealth. Following the same pattern as aggregate income, families owning small businesses have realized a decline in the share of aggregate wealth from 35.3 percent in 1992 to 33.8 percent in 1998. The loss of shares of aggregate wealth by the families owning small businesses was captured by families with no business ownership. Small businesses realizing the most substantial gains in the share of aggregate wealth were self-employed (0-1 employees), somewhat older, organized as corporation, engaged in the service industry and started by the current owner.

Hypothesis 5

The fifth hypothesis states that among families owning small business, those families holding stocks are more likely to be classified as high income (greater than \$50,000) and high wealth (greater than \$1,000,000) families than families not holding stocks. Families holding stocks were substantially different from families not holding stocks for small business owning families. Families owning small businesses who held stock had significantly higher real mean income and real mean wealth than families not holding stocks. In the multivariate analysis, income from the sale of stock holdings was a significant determinant of high income in two of the four years. And, holding stock was a significant determinant of high wealth in two of the four years. Therefore, among small business owners stock holdings were an important, but inconsistent determinant of high income and wealth from 1992 to 1998.

Winners and Losers

Who were the winners and losers in the early 1990s? Clearly, the economic pie increased in size from 1991 through 1997 for most groups of small business owners, however some types of small businesses fared better than others.

- (1) Small business owners without any financial resources invested in publicly traded stock realized very modest gains in wealth and modest losses in net income. Larger small businesses registered the most substantial gains in mean and aggregate net family income and wealth. However, the self-employed (0 to 1 employees) realized very substantial gains in wealth, but much less modest gains in net income.
- (2) The picture was somewhat more mixed with respect to business age. Older businesses seemed to realize more substantial gains than younger businesses.
- (3) Small businesses with more complex legal organizations, such as corporations, were more likely to realize substantial gains than other types of legal organizations. Sole proprietors, the dominant form of ownership, realized smaller gains than any other type of legal organization.
- (4) Small businesses engaged in the service industry realized the most substantial gains in both net income and wealth.
- (5) Small businesses inherited by the current owner realized the largest gains in net income and very modest gains in wealth, while small businesses started by the owner realized the largest gains in wealth.

Small businesses that are larger, older and organized as corporations appear to have fared better in the early 1990s than other small businesses. These well established small businesses had the financial resources to invest in their business and the stock market to realize substantial gains in both net income and wealth. Other small businesses realized much more modest gains. While small business ownership is risky, small business owners had a significantly higher probability of being classified as high income and high wealth. Small business owners were somewhat more likely to be classified as high income (52.2 percent in 1992 versus 56.7 percent in 1998) and high wealth (12.5 percent in 1992 and 14.8 percent in 1998) in 1998 than in 1992. Business investors (angel capitalists and other angels) had a substantially higher probability of being

classified as high income and high wealth families than traditional small business owners (self-employed and owner/managers).

Adequate financial capital is always crucial to success of small businesses. The rapid growth in the general economy, reflected in the increase in the value of publicly traded stock, enabled well-established small businesses to prosper. Small businesses with fewer financial resources that were less well-established realized much more modest gains and less than the gains realized by non-business owning families. However, small business owners as a group realized only modest gains in aggregate net income and wealth because the number of small business owning families (not the number of small businesses), as defined in this study, was quite stable at around 12 to 13 million families.

This estimate of the number of families should be used with caution because it could be represent a sampling problem in the SCF. During an economic expansion families that previously wouldn't have been included in the sampling frame because they were relatively poor and couldn't be easily contacted by telephone are included in the more recent sampling frames. These families are less likely to be small business owners, hence the population of families owning small businesses may be underestimated.

This period of economic expansion was not a prosperous time for the smaller, younger, less well established small businesses. The period of economic expansion may have been a difficult time to start and nurture a small business venture for several reasons:

- (1) Labor costs increased. The unemployment rate fell nearly 7 percent in 1990 to less than 5.0 percent in 1997, hence labor supplies tightened; and average earnings increased by nearly 3.7 percent annually (Statistical Abstract, 2000). In this type of labor market, small business owners were facing higher wages. In addition, small business owners may face substantial challenges finding and retaining high quality employees.
- (2) The opportunity cost of capital increased. While financial capital became less expensive to borrow over this period of time with the prime rate declining from just over 10 percent in 1990 to 8.8 percent in 1997, the value of the stock market (S&P 500) was increasing over 16 percent annually (Statistical Abstract, 2000). Investors, particularly family and friends who may have been willing to invest in a small business venture, had less risky alternatives for their excess cash. In this type of financial market, small business owners may have been facing higher costs of financing and restricted access, especially for start-up financing.
- (3) Other employment opportunities increased the opportunity cost of prospective owners. If higher inflation adjusted net income and wealth are the only important criterion considered by the business owner, many of the families members owning less well-established business may have been better off working for someone else. In a market with relatively low unemployment in a growing economy, the opportunity cost of risking ones family's financial resources in a small business venture increases substantially.

The most successful families owning small businesses were those owning more than one business. This group of families realized increases in mean income and wealth and shares of aggregate income and wealth surpassing all other families (Appendix A).

The small business winners in this economic expansion were those with existing physical, financial and human capital to take advantage of the favorable economic conditions facing them.

The economic expansion was relatively good news for business owning families headed by women. These families realized higher rates of real mean net income (45 percent versus 28 percent) and wealth (108 percent versus 43 percent) growth than other business owners. In addition, these families did substantially better financially than non-business owning families headed by women (Appendix B).

The competitive challenges of starting and nurturing a fledgling business are only compounded by higher labor costs and lower quality labor available in the market, less access to financial capital from family and friends and the lure of reasonably good job opportunities working for someone else in a vibrant economy. The lack of success of the younger, less well established businesses in relation to older, more well-established business (and non-business owning families) in this very prosperous economic time suggests that there is an even more important role for agencies designed to assist fledgling small business start-ups.

References

- Haynes, G.W. & Avery, R.J. (1996). Family businesses: Can the family and business finances be separated: Preliminary results, The Journal of Entrepreneurial and Small Business Finance, 5(1), 17-42.
- Kennickell, A. & Shack-Marquez, J. (1992). Changes in family finances from 1983 to 1989: Evidence from the Survey of Consumer Finances. Federal Reserve Bulletin, January 1992, 1-18.
- Kennickell, A. & Starr-McCluer, M. (1994). Changes in family finances from 1989 to 1992: Evidence from the Survey of Consumer Finances. Federal Reserve Bulletin, October 1994, 861-882.
- Kennickell, A.B. & Starr-McCluer, M. (1997). Changes in family finances in the U.S.: Evidence from the Survey of Consumer Finances. Federal Reserve Bulletin, January 1997, 1-24.
- Kennickell, A.B., Starr-McCluer, M. & Surette, B.J. (2000). Changes in family finances in the U.S.: Evidence from the Survey of Consumer Finances. Federal Reserve Bulletin, January 2000, 1-29.
- Statistical Abstract (2000). U.S. Census Bureau, Administrative and Customer Services Division, Statistical Compendia Branch. www.census.gov/statab
- Wolff, E.N. (1998). Recent trends in the size distribution of household wealth, Journal of Economic Perspectives, 12(3), 131-150.
- Xaio, J.J., M.J. Alhabeeb, G.S. Hong and G.W. Haynes (2000). "Risk Tolerance of Business Owning Families," American Council on Consumer Interests, March.

Appendix A - Families Owning Multiple Businesses

Families Owning Multiple Businesses

This study separates multiple business owners into three groups: business owners that either own or manage more than one business; business owners that own and manage more than one business; and business owners that own, but do not manage, more than one business. These business owners represent an interesting segment of the business owning family population because they have substantially higher mean family income and mean family net worth than other business owners. While they only contribute about 10 to 12 percent of aggregate net family income they control about 25 percent of the total net worth held by the entire population represented in this sample.

These multiple business owners are compared in Tables 3.0a, 4.0a, 5.0a and 6.0a.

Multiple business owners that own and/or manage at least two businesses have the highest mean family income, mean net worth, aggregate income and aggregate net worth. As a group these businesses have substantially higher mean income (\$193,106 versus \$115,629 in 1998) and their mean income has been growing more rapidly than the overall population of businesses (49.5 percent versus 27.5 percent).

A similar picture emerges when examining mean net worth. These business owners have substantially higher mean net worth (\$2.1 million versus \$1.0 million in 1998), however the change in mean net worth has been very similar to the change realized by all businesses, around 40 percent increase from 1992 through 1998.

These businesses make a substantial contribution to aggregate income and their share of aggregate income grew from 10.5 percent to 12.1 percent from 1992 through 1998. This percentage change in aggregate income was over twice as high as the change realized by all businesses (43.9 percent versus 21.8 percent).

While these businesses make a substantial contribution to aggregate net income, they hold about 25 percent of total net worth (and over 50 percent of total net worth held by business owners). As a group their aggregate net worth has grown at about the same rate as all businesses with families who owned and managed businesses realizing a somewhat slower rate of growth and families who only invested in businesses realizing a somewhat faster rate of growth.

These families owning multiple businesses warrant further investigation because of relatively high percentage of total net worth held by this select group of owners. In addition, this group of owners has realized substantial growth in both net family income and net worth from 1992 through 1998.

Table 3.0a Summary of Changes in Mean Household Income by Selected Characteristics

Mean Household Income in 1998 dollars

Characteristic	Mean Household Income				% Change 92-98
	1992	%	1998	%	
Mean Income, Total Sample	45,576	100.0	53,121	100.0	16.6
No Business	38,077	83.5	43,999	82.8	15.6
All Business	90,682	199.0	115,629	217.7	27.5
Self-employed	59,611	130.8	65,010	122.4	9.1
Owner manager	100,693	220.9	123,718	232.9	22.9
Angel capitalist	100,708	221.0	149,248	281.0	48.2
Other angel	202,437	444.2	423,793	797.8	109.3
Stock owners	86,979	190.8	96,977	182.6	11.5
Non-business owners	68,228	149.7	74,324	139.9	8.9
Business owners	143,331	314.5	180,940	340.6	26.2
Non-stock owners	34,313	75.3	36,181	68.1	5.4
Non-business owners	31,136	68.3	33,812	63.7	8.6
Business owners	59,152	129.8	58,890	110.9	-0.4
Multiple Business Owners					
Owned or managed more than one business	129,162	283.4	193,106	363.5	49.5
Owned and managed more than one business	139,876	306.9	211,584	398.3	51.3
Owned more than one business	100,708	221.0	149,248	281.0	48.2

Note: Number of observations - owned or managed more than one business (616 in 1992, 567 in 1998), owned and managed more than one business (503 in 1992, 446 in 1998) and owned more than one business (113 in 1992, 121 in 1998).

Table 4.0a Summary of Changes in Mean Household Net Worth by Selected Characteristics

Mean Household Net Worth in 1998 dollars

Characteristic	Mean Household Net Worth				% Change 92-98
	1992	%	1998	%	
Mean Net Worth, Total Sample	208,480	100.0	278,876	100.0	33.8
No Business	125,164	60.0	171,904	61.6	37.3
All Business	709,659	340.4	1,011,924	362.9	42.6
Self-employed	257,118	123.3	450,616	161.6	75.3
Owner manager	822,627	394.6	1,063,989	381.5	29.3
Angel capitalist	983,427	471.7	1,759,360	630.9	78.9
Other angel	2,495,442	1197.0	4,172,997	1496.4	67.2
Stock owners	562,985	270.0	688,600	246.9	22.3
Non-business owners	339,020	162.6	409,444	146.8	20.8
Business owners	1,236,084	592.9	1,723,308	617.9	39.4
Non-stock owners	112,045	53.7	120,618	43.3	7.7
Non-business owners	75,930	36.4	92,109	33.0	21.3
Business owners	394,393	189.2	393,898	141.2	-0.1
Multiple Business Owners					
Owned or managed more than one business	1,443,463	692.4	2,079,219	745.6	44.0
Owned and managed more than one business	1,616,679	775.5	2,213,978	793.9	36.9
Owned more than one business	983,427	471.7	1,759,360	630.9	78.9

Note: Number of observations - owned or managed more than one business (616 in 1992, 567 in 1998), owned and managed more than one business (503 in 1992, 446 in 1998) and owned more than one business (113 in 1992, 121 in 1998).

Table 5.0a Summary of Changes in Aggregate Income by Selected Characteristics

Aggregate Income in billions of 1998 dollars

Characteristic	Aggregate Income				
	1992	%	1998	%Change % 92-98	
Total Aggregate	4,371.5	100.0	5,447.5	100.0	24.6
No Business	3,131.6	71.6	3,937.5	72.3	25.7
All Business	1,239.9	28.4	1,510.0	27.7	21.8
Self-employed	298.1	6.8	285.2	5.2	-4.3
Owner manager	710.5	16.3	895.5	16.4	26.0
Angel capitalist	76.7	1.8	151.3	2.8	97.3
Other angel	70.9	1.6	178.0	3.3	151.1
Stock owners	1,784.1	40.8	2,771.0	50.9	55.3
Non-business owners	1,050.1	24.0	1,672.5	30.7	59.3
Business owners	734.0	16.8	1,098.5	20.2	49.7
Non-stock owners	2,587.4	59.2	2,676.5	49.1	3.4
Non-business owners	2,081.5	47.6	2,265.0	41.6	8.8
Business owners	505.8	11.6	411.5	7.6	-18.6
Multiple Business Owners					
Owned or managed more than one business	459	10.5	661	12.1	43.9
Owned and managed more than one business	361	8.3	509	9.3	41.0
Owned more than one business	98	2.2	151	2.8	54.6

Table 6.0a Summary of Changes in Aggregate Net Worth by Selected Characteristics

Aggregate Net Worth in billions of 1998 dollars

Characteristic	Aggregate Net Worth				
	1992	%	1998	%	% Change 92-98
Total Aggregate	19,997	100.0	28,598	100.0	43.0
No Business	10,294	51.5	15,384	53.8	49.4
All Business	9,703	48.5	13,215	46.2	36.2
Self-employed	1,286	6.4	1,977	6.9	53.7
Owner manager	5,780	28.9	7,701	26.9	33.2
Angel capitalist	956	4.8	1,784	6.2	86.6
Other angel	1,681	8.4	1,753	6.1	4.3
Stock owners	11,548	57.7	19,676	68.8	70.4
Non-business owners	5,218	26.1	9,213	32.2	76.6
Business owners	6,330	31.7	10,462	36.6	65.3
Non-stock owners	8,449	42.3	8,923	31.2	5.6
Non-business owners	5,076	25.4	6,170	21.6	21.6
Business owners	3,373	16.9	2,753	9.6	-18.4
Multiple Business Owners					
Owned or managed more than one business	5,131	25.7	7,112	24.9	38.6
Owned and managed more than one business	4,174	20.9	5,329	18.6	27.7
Owned more than one business	956	4.8	1,784	6.2	86.6

Note: Number of observations - owned or managed more than one business (616 in 1992, 567 in 1998), owned and managed more than one business (503 in 1992, 446 in 1998) and owned more than one business (113 in 1992, 121 in 1998).

Appendix B - Women Headed Households

Women Headed Households

Women headed households are compared with all other households from 1992 through 1998 in Tables 3.0b, 4.0b, 5.0b and 6.0b. Families headed by women have mean family incomes that are less than one-half of the mean family income earned by all families and they realized less than one-half of the growth in mean family income of all families (7.1 percent from 1992 through 1998). While business owning families headed by women had substantially higher mean family income than all women headed households, they had family incomes that were less than one-half of the family income of all business owners. However, these business owning families headed by women realized a much higher rate of mean income growth than the average business (45.2 percent versus 27.5 percent).

The mean household net worth statistics paint a similar picture. All women headed households have substantially lower net worth than all households in the sample and they have realized a relatively slow rate of net worth growth. Business owning families headed by women have substantially higher net worth than non-business owning families, but substantially lower net worth than other business owners. As with net income, these business owning families headed by women have realized a much higher rate of mean net worth growth than the average business (107.5 percent versus 42.6 percent).

Women headed households contribute over 13.5 percent of aggregate income in 1992 and over 12.5 percent of aggregate income in 1998. While they realized nearly a 15 percent increase in aggregate income, their total contribution to aggregate income actually declined slightly. Business owning families headed by women contributed only about 1 percent to aggregate income, however they realized a higher percentage change in aggregate income than other women householders.

Women headed households held about 13 percent of aggregate net worth in 1992 and 1998. They actually realized a substantial increase in aggregate net worth, however this increase lagged behind the increase realized by the population in general. Business owning families headed by women held a relatively small portion of aggregate net worth, however they realized a higher percentage change than the entire population of businesses from 1992 through 1998.

Please note that this method of identifying women business owners underestimates their share of aggregate income and wealth. These estimates should not be compared with other estimates of the share of aggregate income or wealth derived from the National Survey of Small Business Finances that utilize a business, rather than household, sampling frame.

Table 3.0b Summary of Changes in Mean Household Income by Selected Characteristics

Mean Household Income in 1998 dollars

Characteristic	Mean Household Income				
	1992	%	1998	%Change % 92-98	
Mean Income, Total Sample	45,576	100.0	53,121	100.0	16.6
No Business	38,077	83.5	43,999	82.8	15.6
All Business	90,682	199.0	115,629	217.7	27.5
Self-employed	59,611	130.8	65,010	122.4	9.1
Owner manager	100,693	220.9	123,718	232.9	22.9
Angel capitalist	100,708	221.0	149,248	281.0	48.2
Other angel	202,437	444.2	423,793	797.8	109.3
Stock owners	86,979	190.8	96,977	182.6	11.5
Non-business owners	68,228	149.7	74,324	139.9	8.9
Business owners	143,331	314.5	180,940	340.6	26.2
Non-stock owners	34,313	75.3	36,181	68.1	5.4
Non-business owners	31,136	68.3	33,812	63.7	8.6
Business owners	59,152	129.8	58,890	110.9	-0.4
Women Householders, All	22,355	49.0	23,941	45.1	7.1
Women Householders, Business owning families	41,926	92.0	60,892	114.6	45.2

Note: Number of observations for all women housholders (829 in 1992, 944 in 1998) and women householders business owning families (76 in 1992, 61 in 1998).

Table 4.0b Summary of Changes in Mean Household Net Worth by Selected Characteristics

Mean Household Net Worth in 1998 dollars

Characteristic	Mean Household Net Worth				
	1992	%	1998	%	%Change 92-98
Mean Net Worth, Total Sample	208,480	100.0	278,876	100.0	33.8
No Business	125,164	60.0	171,904	61.6	37.3
All Business	709,659	340.4	1,011,924	362.9	42.6
Self-employed	257,118	123.3	450,616	161.6	75.3
Owner manager	822,627	394.6	1,063,989	381.5	29.3
Angel capitalist	983,427	471.7	1,759,360	630.9	78.9
Other angel	2,495,442	1197.0	4,172,997	1496.4	67.2
Stock owners	562,985	270.0	688,600	246.9	22.3
Non-business owners	339,020	162.6	409,444	146.8	20.8
Business owners	1,236,084	592.9	1,723,308	617.9	39.4
Non-stock owners	112,045	53.7	120,618	43.3	7.7
Non-business owners	75,930	36.4	92,109	33.0	21.3
Business owners	394,393	189.2	393,898	141.2	-0.1
Women Householders, All	98,166	47.1	127,636	45.8	30.0
Women Householders, Business owning families	356,404	171.0	739,600	265.2	107.5

Table 5.0b Summary of Changes in Aggregate Income by Selected Characteristics

Aggregate Income in billions of 1998 dollars

Characteristic	Aggregate Income				
	1992	%	1998	%Change % 92-98	
Total Aggregate	4,371.5	100.0	5,447.5	100.0	24.6
No Business	3,131.6	71.6	3,937.5	72.3	25.7
All Business	1,239.9	28.4	1,510.0	27.7	21.8
Self-employed	298.1	6.8	285.2	5.2	-4.3
Owner manager	710.5	16.3	895.5	16.4	26.0
Angel capitalist	76.7	1.8	151.3	2.8	97.3
Other angel	70.9	1.6	178.0	3.3	151.1
Stock owners	1,784.1	40.8	2,771.0	50.9	55.3
Non-business owners	1,050.1	24.0	1,672.5	30.7	59.3
Business owners	734.0	16.8	1,098.5	20.2	49.7
Non-stock owners	2,587.4	59.2	2,676.5	49.1	3.4
Non-business owners	2,081.5	47.6	2,265.0	41.6	8.8
Business owners	505.8	11.6	411.5	7.6	-18.6
Women Householders, All	597	13.6	684	12.6	14.7
Women Householders, Business owning families	51	1.2	61	1.1	18.9

Note: Number of observations for all women housholders (829 in 1992, 944 in 1998) and women householders business owning families (76 in 1992, 61 in 1998).

Table 6.0b Summary of Changes in Aggregate Net Worth by Selected Characteristics

Aggregate Net Worth in billions of 1998 dollars

Characteristic	Aggregate Net Worth				
	1992	%	1998	%	% Change 92-98
Total Aggregate	19,997	100.0	28,598	100.0	43.0
No Business	10,294	51.5	15,384	53.8	49.4
All Business	9,703	48.5	13,215	46.2	36.2
Self-employed	1,286	6.4	1,977	6.9	53.7
Owner manager	5,780	28.9	7,701	26.9	33.2
Angel capitalist	956	4.8	1,784	6.2	86.6
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Non-business owners	5,218	26.1	9,213	32.2	76.6
Business owners	6,330	31.7	10,462	36.6	65.3
Non-stock owners	8,449	42.3	8,923	31.2	5.6
Non-business owners	5,076	25.4	6,170	21.6	21.6
Business owners	3,373	16.9	2,753	9.6	-18.4
Women Householders, All	2,619	13.1	3,648	12.8	39.3
Women Householders, Business owning families	433	2.2	735	2.6	69.9

Note: Number of observations for all women housholders (829 in 1992, 944 in 1998) and women householders business owning families (76 in 1992, 61 in 1998).